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Listing first 45 summaries
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                     AAB14276
AAY91252
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AAY91258
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(without alignments)
41.879 Million cell updates/sec
                                                   HIV-1 p195 epitope
HIV neutralising e
HIV-1 epitope #10.
HIV-1 gp41/gp120 e
HIV-1 epitope #4.
Modified MVF Th ep
Modified MVF Th ep
                                                                                                                                                                                                 Description
Peptide #3977 enco
Peptide #4038 enco
Protein #3872 enco
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ALIGNMENTS

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RESULT 1
AAB14276
ID AAB1
XX AAB1
AC AAB1
XX HIV-
XX HIV-
XX HIV-
XX HUMA
XX HO2C
XX HUMA
PD 20-1
XX 20-1
XX 11-2
PF 07-1
XX HIT-
PR 06-h
XX WPI
XX WPI
XX WPI
XX WPI
XX NEW
PT NEW
PT NEW
PS Cla:
Claim 14; Page 41; 54pp; English.
                                                                                                                      11-JAN-1999;
06-MAY-1999;
                    New antigenic peptide is useful as human immunodeficiency virus-1 -
                                                                           Scala
                                                                                                                                                      07-JAN-2000; 2000WO-US00372
                                                                                                                                                                                                WO200042068-A2.
                                                       WPI; 2000-524189/47.
                                                                                                                                                                             20-JUL-2000.
                                                                                                (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                           G, Chen X, Cohen OJ, Fauci A;
                                                                                                                      99US-0115430.
99US-0132760.
                                a vaccine for protecting against
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Human immunodeficiency virus type 1.

HIV-1; antigenic determinant; vaccine; epitope; p195; AIDS

HIV-1 p195 epitope. 07-MAR-2001 (first entry) AAB14276;

AAB14276 standard; peptide; 9 AA

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RESULT 2
AAY91252
*333333*&
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Matches 9
                                                          The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer immunotherapy; for inhibition of the action of luteinising hormone releasing hormone (LHRH) for contraception, treatment of hormone-dependent cancer, prevention of boar taint in meat, and immunocastration); for promoting the growth of animals; or for tractical and the province of the section o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present peptide is the p195 epitope (antigenic determinant) f HIV-1. The present sequence may be used in a vaccine to protect a HIV-1 infection. The present peptide was identified by screening peptide libraries using sera from HIV infected subjects who were term non-progressors to AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 13; Page 63; 129pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or himan immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cholesteryl ester transport protein; anti-arteriosclerotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Promiscuous T-cell epitope; measles virus F protein; MVF; hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; luteinising hormone releasing hormone; LHRH; contraceptive; anticancer; somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY91252 standard; peptide;
                  treating aller Th (functional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV neutralising epitope, SEQ ID NO: 130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; lasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunodeficiency virus type 1.
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9; Conserv
                                  stration); for promoting the growth of animals; or for allergies or arteriosclerosis. Incorporation of a pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             c site, for immunization immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0100412.
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Pred. No.
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                     subjects)
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3. 7.8e+05;
0;
                                          Incorporation of a promiscuous
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CC is the LHRH target antigenic peptide used in these LHRH antigenic
CC peptides. AAY91200 is somatostatin, and AAY91201-Y91207 are antigenic
CC peptides comprising somatostatin and a Th epitope. Somatostatin
CC immunogens may be used to promote growth in livestock. AAY91208 is a
CC human CD4 CDR2-like domain antigenic site, and AAY91209-Y90211 are MVH Th
CC epitope/CD4 CDR2 antigenic peptides which may be used to prevent HIV
CC infection of T cells. AAY90212 is a modified version of a human IgE
CC (immunoglobulin E) CH3 domain, and AAY90213-Y90219 are Th epitope/IgE CH3
CC (immunoglobulin E) CH3 domain, and AAY90213-Y90219 are The epitope/IgE CH3
CC (immunoglobulin E) CH3 domain, and AAY90213-Y90219 are The epitope/IgE CH3
CC (immunoglobulin E) CH3 domain, and AAY90213-Y90219 are The epitope/IgE CH3
CC (immunoglobulin E) CH3 domain, and AAY90213-Y90219 are The epitope and a AP91223-Y91225 comprise this peptide and a Th
CC epitope. AAY91223 is a Plassmodium falciparum circumsporozoite (CS) target
CC antigen, and AAY91224-Y91225 comprise the CS antigen and an MVF Th
CC epitope. AAY91223-Y91245 comprise the CS antigen and an MVF Th
CC epitope. AAY91223-Y91246 and a Th epitope which may be used to prevent or treat
CC CETP peptide and a Th epitope which may be used to prevent or treat
CC care HIV-1 neutralising B-cell epitopes, and AAY91247 and AAY91252-Y91257
CC CAAY91258-Y91273 are antigenic peptides comprising MVH Th and HIV-1 B-cell
CC epitope which may be used as a component in an anti-HIV-1 vaccine.
CC AAY91298 and AAY9149 are respectively an immunostimulatory invasin
CC epitope Tom versinia species, and hinge spacer peptide, both of
CC invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB14273 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY91144-Y91155 are synthetic epitopes derived from this HBV epitope. AAY91156-Y91196, AAY91227 and AAY91242-Y91244 are antigenic peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          epitopes. Sequence AAY91121 represents a promiscuous T helper epitope from the measles virus F (MVF) protein and sequences AAY91122-Y91142. AAY91226 and AAY91245-Y91246 represent synthetic Th epitopes based on MVF Th epitope. Sequence AAY91143 represents a promiscuous Th epitope from hepatitis B virus (HBV) surface antigen, and sequences
                                                                                                  Misc-difference
                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                 HIV-1 epitope #10
                                                                                                                                                                                                                                                                                                                                                                                         07-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB14273;
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                                                                                                                                                                                                                                                                 immunodeficiency
                                                                                                                                                                                                                                                                                                          antigenic determinant; vaccine; epitope; AIDS
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9; Conserv
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                                  /note- "X is independently an amino acid amino acids with the proviso that X is not the amino acid or amino acids naturally in
                                                                                                subsequences
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                 subsequences
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                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                 virus type 1.
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Best Local :
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                                                                                                                                                                                   (CNEN )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present peptide is an epitope (antigenic determinant) from HIV-1. The present sequence may be used in a vaccine to protect against HIV-1 infection. The present peptide was identified by screening random peptide libraries using sera from HIV infected subjects who were long
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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06-MAY-1999;
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Novel fusion protein, usef virus, comprises an amino
                                                                       N-PSDB; ABK50059
                                                                                                                                                                                                                                                     16-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1 gp41/gp120 epitope #5 peptide sequence.
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immunodeficiency virus-1 -
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                                                                                                                                        Marusic
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99US-0132760
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100.0%;
useful for treating e.g. HIV-1 and mino terminal antigenic determinant
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Pred. No.
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hepatotrophic.
influenza
portion of
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RESULT 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EBV) or influenza virus. The medicaments prepared using the molecules of the invention are useful for treating infectious diseases, preferably acquired immunodeficiency syndrome (AIDS), viral hepatitis, influenza and other pathology associated with EBV virus. The present amino acid sequence represents the HIV gp41/gp120 epitope #5 that was used in the methods of the invention as a fusion protein, as described above. Note: The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied by the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    terminal (CPV) or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              terminal portion in such a way that the antigenic determinant is in frame with CPV or its variant. The molecules of the invention are useful for preparing a pharmaceutical composition for treating a pathology associated with bacterial or viral pathogenic agent such as human immunodeficiency virus (HIV), hepatitis C virus (HCV), Epstein-Barr virus remunodeficiency virus (HIV), hepatitis C virus (HCV), Epstein-Barr virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    e.g. influenza virus, fused to carboxy terminal portion comprising capsid protein of potato virus \boldsymbol{X} -
                                                                                                                                                                                                                                                                06-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV-1; antigenic determinant; vaccine; epitope; AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-1 epitope
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                                                                                                              antigenic peptide is useful as
an immunodeficiency virus-1 -
                                                                                                                                                                2000-524189/47.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nal portion comprising an antigenic determinant and a carboxy nal portion comprising the capsid protein of potato virus X ( or its variant. The amino terminal portion is fused to the c
                                                                                                                                                                                                G,
                                                                                                                                                                                                                                                                                                                                                                                                             immunodeficiency virus type 1.
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9; Conser
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99US-0132760
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100.0%; Pr
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Pred. No.
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                                                                                                                             a vaccine for protecting against
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The present peptide is an epitope (antigenic determinant) from HIV-1. The present sequence may be used in a vaccine to protect a HIV-1 infection. The present peptide was identified by screening peptide libraries using sera from HIV infected subjects who were

to protect against

Claim 1;

Page 38;

54pp;

English.

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RESULT 6
AAY91258
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                                                                                                                                                               The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer
immunotherapy; for inhibition of the action of luterinising hormone (LHRH) for contraception, treatment of hormone-dependent cancer, prevention of boar taint in meat, and immunocastration); for promoting the growth of animals or for treating allergies or arteriosclerosis. Incorporation of a promiscu Th (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong T helper cell-mediated immune response, resulting in production of antibodies against a target antigen. Th can replace carrier proteins and pathogen-derived T helper epito
                                                                                                                                                                                                                                                                                                                                                               New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus -
                                                                                                                                                                                                                                                                                                                                   Claim 13; Page 63; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMD foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; Plasmodium falciparum; circumsporozoite; antimalarial; CETP; cholesteryl ester transport protein; anti-arteriosclerotic.
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Chimeric -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hepatitis B virus surface antigen; HBV; immunogenic; B-cell luteinising hormone releasing hormone; LHRH; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Promiscuous T-cell epitope; measles virus F protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY91258
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UNBI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UNITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Measles virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Th epitope/HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0100412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              epitope, SEQ ID NO:136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 40;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                   Incorporation of a promiscuous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 21
0.33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            eptive; anticancer;
antiviral; FMDV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B-cell epitope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                 T helper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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epitope/CD4 CDR2 antigenic peptides which may be used to prevent HIV infection of T cells. AAY90212 is a modified version of a human IgE (immunoglobulin E) CH3 domain, and AAY90213 v90219 are Th epitope/IgE CH3 antigenic peptides which may be used in the treatment of allergies. AAY91220 is a peptide derived from foot and mouth disease virus (FMDV) VP1 capsid protein and AAY91221-v9122 comprise this peptide and a Th epitope. AAY91223 is a plasmodium falciparum circumsporozoite (CS) target antigen, and AAY91224-v91225 comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. AAY91228-v91231 represent CETP-derived peptides and AAY91232-v91241 are immunogens comprising a CETP peptide and a Th epitope which may be used to prevent or treat arteriosclerosis and cardiovascular disease. AAY91247 and AAY91252-v91257 are HTV-1 neutralising B-cell epitopes, and AAY91248-v91251 and AAY91258-v9173 are antigenic peptides, and AAY91248-v91251. AAY91258-Y91273 are antigenic peptides comprising MVH Th and HIV-1 B-cell epitope which may be used as a component in an anti-HIV-1 vaccine. AAY91198 and AAY91199 are respectively an immunostimulatory invasin protein epitope from Yersinia species, and hinge spacer peptide, both of which may optionally be used in the antigenic peptides of the peptides. AAY91200 is somatostatin, and AAY91201-Y91207 are antigenic peptides comprising somatostatin and a Th epitope. Somatostatin immunogens may be used to promote growth in livestock. AAY91208 is a AAY91144-Y91155 are synthetic epitopes derived from this HBV epitope AAY91156-Y91196, AAY91227 and AAY91242-Y91244 are antigenic peptides comprising an LHRH sequence joined to a promiscuous Th epitope. AAY9 from the measles virus F (MVF) protein and sequences AAY91122-Y91142, AAY91226 and AAY91245-Y91246 represent synthetic Th epitopes based on MVF Th epitope. Sequence AAY91143 represents a promiscuous Th epitope human CD4 CDR2-like domain antigenic site, and AAY91209-Y90211 are is the LHRH target antigenic peptide used in these LHRH antigenic from hepatitis B virus (HBV) surface antigen, 29 and sequences this HBV epitope. based on AAY91197 MVH Th the

Sequence

Matches Query Match Local Similarity nes 9; Conser 2 KSSGKLISL 10 Conservative 95.2**%**; 100.0**%**; 0, Score 40; Pred. No. Mismatches DB 21; 0.48; 0; Length Indels 0, Gaps 0

B QΥ

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KSSGKLISL 9

AAY91259

AAY91259 standard; peptide; 29 A

AAY91259

22-MAY-2000 (first entry)

Modified MVE Τ'n epitope/HIV epitope, SEQ ID NO:137

Promiscuous T-cell epitope; measles virus F protein; MVF; hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; luteinising hormone releasing hormone; LHRH; contraceptive; anticancer; cholesteryl ester foot and lasmodium atin; growth promotion; CD4 receptor; HIV-1; antivi: mouth disease virus; immunoglobulin E; IgE; anti-a um falciparum; circumsporozoite; antimalarial; CETP transport protein; CD4 receptor; HIV-1; antiviral; FMDV;
mmunoglobulin E; IgE; anti-allergic; anti-arteriosclerotic

Chimeric Chimeric Human Measles virus immunodeficiency virus

21-JUN-1999; 99WO-US13975

20-JUN-1998; 98US-0100412.

UNITED BIOMEDICAL INC

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CC antigen. The can replace carrier proteins and pathogen-derived T helper CC epitopes. Sequence AAY91121 represents a promiscuous T helper epitope CC from the measles virus F (MFV) protein and sequences AAY91122-Y91142, CC AAY9126 and AAY91245-Y91246 represent synthetic Th epitopes based on the CC MFT The epitope. Sequence AAY91143 represents a promiscuous The epitope CC from hepatitis B virus (HBV) surface antigen, and sequences based on the CC AAY91144-Y91155 are synthetic epitopes derived from this HBV epitope. CC CAY91146-Y91195, AAY91277 and AAY91242-Y91244 are antigenic peptides CC comprising an LHRH sequence joined to a promiscuous Th epitope. AAY91197 CC is the LHRH target antigenic peptide used in these LHRH antigenic peptides. CC comprising somatostatin, and AAY91201-Y91207 are antigenic peptides. CC peptides comprising somatostatin, and AAY91201-Y91207 are antigenic comprising somatostatin and a The pitope. Somatostatin CC peptides comprising somatostatin, and AAY91201-Y91207 are antigenic comprising somatostatin, and AAY91201-Y91207 are antigenic comprising peptides which may be used to provent HIV CC infection of T cells. AAY90121 is a modified version of a human 1gE CC (immunoglobulin E) CH3 domain, and AAY9023-Y90219 are The pitope/IgE CH3 cantigenic peptides which may be used in the treatment of allergies. CC AAY91220 is a peptide derived from foot and mouth disease virus (FMDV) CC epitope. AAY91223 is a Plasmodium falciparum circumsporozoite (CS) target CC epitope. AAY91223 is a plasmodium falciparum circumsporozoite (CS) target CC epitope. AAY91223 and AAY91233-Y91241 are immunogens comprising a CC entrescent peptides and antigenic peptides comprise this peptide and a Th CC epitope. AAY91273 are antigenic peptides comprise the CS antigen and an MFF Th CC epitope which may be used in a malaria vaccine. AAY91274 and AAY91252-Y91257 care HIV-1 section epitope which may be used as a component in an anti-HIV-1 vaccine. CC AAY9128-Y91281 and PASSED epitope which may be used to prevent or treat comp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunocastration); for promoting the growth of animals; or for treating allergies or arteriosclerosis. Incorporation of a promiscut The (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong T helper cell-mediated immune response, resulting in production of antibodies against a target and the production of antibodies against a target of the production of a promiscut production of a production o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        response, reantigen. Th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunotherapy; for inhibition of the action of luteinising hormone releasing hormone (LHRH) for contraception, treatment of hormone-dependent cancer, prevention of boar taint in meat, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or human immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                            protein epitope from which may optionally
                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention relates to novel promiscuous T helper cell epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-160564/14.
                                                                KSSGKLISL 10
                                                                                                                                         l Similarity
9; Conserv
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                                                                                                                                                                                                                                                                                         29
                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                         A
                                                                                                                                                                       95.2%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                        Yersinia species, and hinge spacer peptide, both of be used in the antigenic peptides of the
                                                                                                                                         0;
                                                                                                                                                                       Score 40;
Pred. No.
                                                                                                                                         Mismatches
                                                                                                                                                                           DB 21;
0.48;
                                                                                                                                         0
                                                                                                                                                                                                             Length 29;
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                                                                                                                                         0;
                                                                                                                                     Gaps
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RESULT 8
ABB31326
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                                 Matches
                                                 Best Local
                                                             Query Match
                                                                                                                       agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring gene expression, with far less blas than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                  derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for determining predisposition and/or prognosing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical
                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-FEB-2000;
26-MAY-2000;
                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                   the probes with a collection of detectably labelled nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US00662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200157271-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease; cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide #3977 encoded by breast cell single exon nucleic acid probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB31326
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; microarray; single exon probe; gene expression; breast;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-SEP-2000;
 2 KSSGKLIS 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-496933/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULAR DYNAMICS INC
                               Similarity 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 14294; 327pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanzel DK,
                                                                                              38 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0236359.
                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0180312
2000US-0207456
                                                 78.6%;
87.5%;
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                                 1;
                                               Score 33;
Pred. No.
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                                 Mismatches
                                               DB 16;
                                                              22;
                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                               English
                                 0,
                                 Gaps
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17

KSAGKLIS

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RESULT

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RESULT 10
ABB21873
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                                                                                                                                                                    Matches
                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                               liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
           Human; gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease.
                                                                                                                                                                                                                                                                                                                                                     Penn
                                                                                                                                                                                                                                                                                                              analyzing
                                                                                            ABB21873
                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                       measuring
                                                                                                                                                                                                                                                                              The invention relates to a single exon nucleic acid probe for
                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                             21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                             03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAY-2000;
30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US00669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200157277-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide #4038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB36532;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABB36532 standard;
                                                                                                                                                                                                                                                                                                                                                                     (MOLE-)
                                                                                                                                   17
                                                                                                                                                   Ν
                                                                                                                                          KSSGKLIS
                                                                                                                                   KSAGKLIS
                                                                                                                                                                                                                                                                                                                                      2001-483447/52.
                                                                                                                                                                                                                                                                                                              genome-derived single exon nucleic acid probes useful for
zing gene expression in human fetal liver -
                                                                                                                                                                                                                                                                                              27; SEQ
                                                                                                                                                                 l Similarity
7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  foetal
                                                                                                                                                                                                                                                                                                                                                                     MOLECULAR DYNAMICS INC
                                                                                           standard;
                                                                                                                                                                                                                                                                      human gene expression in a sample derived from human foetal
                                                                                                                                                                                                                                                                                                                                                     Hanzel DK,
                                                                                                                                                                                                  38
                                                                                                                                                                                                                                                                                                                                                                                   2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0234687.
2000US-0236359.
                                                                                                                                                                   Conservative
                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0180312
                                                                                                                                                  9
                                                                                                                                                                                                  AA;
                                           encoded by probe
                                                                                                                                                                                                                                                                                              ID NO 29167; 639pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               encoded by human foetal liver single exon probe.
                                                                                          Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide;
                                                                                                                                                                         78.6%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                     Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 expression;
                                                                                            38
                                                                                                                                                                  1;
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                                                                                                                                                                         Score
Pred.
                                                                                           AΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA.
                                          for measuring heart cell gene
                                                                                                                                                                                                                                                                                                                                                     Rank DR;
                                                                                                                                                                   Mismatches
                                                                                                                                                                         33;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single exon nucleic acid
                                                                                                                                                                         DB
16;
                                                                                                                                                                                  22;
                                                                                                                                                                 0;
                                                                                                                                                                                Length 38;
                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                a single exon
                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 probe
                                                                                                                                                                 Gaps
                                                                                                                                                                 0;
     B
                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                               AAM57294
                                                                                                                                                                         RESULT 11
                                                                                                                                                                                                                                Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
30-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
           30-JAN-2001; 2001WO-US00667
                           09-AUG-2001.
                                           WO200157275-A2
                                                          Homo sapiens.
                                                                                                                           05-NOV-2001
                                                                                                                                          AAM57294;
                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                     Claim 15;
                                                                                                                                                                                                                                                                                                                                                                                                           Single
                                                                                                                                                                                                                                                                                                                                                                                                                                           Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                     hearts
                                                                                                                                                                                                  17
                                                                                                                                                                                                                                Local Similarity
nes 7; Conserv
                                                                                                                                                                                                                 2 KSSGKLIS
                                                                                                                                                                                                 KSAGKLIS
                                                                                                                                                                                                                                                                                                                                                                                                                           2001-488899/53
                                                                                                          brain
                                                                                                                                                                                                                                                                                                                                                                                                      exon
                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanzel
                                                                                                                                                                                                                                                               38
                                                                                                         expressed
                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                               ĀΑ;
                                                                                                                                                                                                 24
                                                                                                                                                                                                                                                                                                                                                                                                                                          DK,
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By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease, note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
microarray; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart ABA21535-ABA41305). The present sequence is a protein encoded by one
                           Human; brain expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                           AAM57294 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULAR DYNAMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID No 23643; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78.6%;
                                                                             single exon probe encoded protein SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Σ
                                                                                                                                                                                                                                                38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 33; DB Pred. No. 16; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for analyzing gene expression
  multiple sclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
  schizophrenia
                                                                                   Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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RESULT 12

AAM69699

ID AAM6

XX AAM6

XX AAM6

XX Huma

XX Huma

XX Home

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Best Local S
Matches 7
                                                                                                                                                       04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of
                                                                                                                                                                                                                                                                                                                                                                           WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                     microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Penn
                                                                                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US00668
                                                                                                                                                                                                                                                                                                                                     09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM69699;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAM69699 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single
                                                           Penn
                                                                                                (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 probes of the
                    2001-488900/53
                                                           SG,
                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KSAGKLIS 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KSSGKLIS 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exon nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
7; Conserv
                                                                                              MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULAR DYNAMICS INC
                                                         Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                           marrow expressed exon; gene expression cancer; leukaemia; lymphoma; myeloma
                                                                                                                                    2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
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2000US-0207456
2000US-0608408
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2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein; 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78.6%;
87.5%;
                                                         Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  probes
                                                         ξ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probe encoded
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      650pp + Sequence
                                                         Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       expression analysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30005
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AAMITS11
ID AAMITS11
ID AAMITS11
XX AAMITS11
XX Pepti
XX O9-AU
XX 30-JA
PFR 04-FE
PR 04-FE
PR 27-SE
PR 04-GC
PR WPI;
XX Penn
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XX Penn
XX Penn
CC The FC CC The FC CC Senth
CCC Note:
CCC Note:
CCC Note:
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Best Local :
                                                                                                                                                                                                                                                                                                                                                 04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                   The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancer such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention.
                                                                                                                                                     Claim
                                                                                                                                                                                analyzing
                                                                                                                                                                                                                                                                                                           04-OCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200157278-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probe; human; microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide #3945 encoded by probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM17511;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAM17511 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present
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                                                                                                                                                                                                                                                                                 (MOLE-)
                                                                                                                                                                                                                                                                                                                                     21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
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                                                                                                                                                                                                                                                     SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
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                                                                                                                                                                                                                        2001-488901/53
                                                                                                                                                     27;
                                                                                                                                                                             genome-derived single exon nucleic acid probes useful for zing gene expression in human cervical epithelial cells -
                                                                                                                                                                                                                                                                               MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 7; Conserv
                                                                                                                                                   SEQ ID No 22337; 487pp; English.
                                                                                                                                                                                                                                                     Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO: 30005; 658pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38
                                                                                                                                                                                                                                                                                                        2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632368.
2000US-0234687.
2000US-02346359.
2000US-0236359.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention provides
                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US00670
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĀΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78.6%;
87.5%;
                                                                                                                                                                                                                                                    Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                                                                                                                                                                                     Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; · Score 33; DB
; Pred. No. 16;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for measuring cervical gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA
                                                                                                                                                                                                                                                     Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 number of single exon nucleic
                                                                                                                                                                                                                                                     DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cervical epithelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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Note: The sequence data for this patent did not form specification, but was obtained in electronic format

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RESULT 15
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AAM30033
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Matches 7; Conserv
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Best Local :
                                                                                                                                     The present invention relates to single exon nucleic acid probes (SENP: see AAI31315-AAI57546). The present sequence is a peptide encoded by one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of human genetic disorders.
                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probe; microarray; genetic disorder.
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                                                                                                                                                                                                        Claim 27;
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27-SEP-2000;
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30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide #4070 encoded by probe for measuring placental gene expression.
                                         17 KSAGKLIS
                                                   2 KSSGKLIS
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                                                                                                                                                                                                                         genome-derived single exon nucleic acid zing gene expression in human placenta -
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2000US-0608408.
2000US-0632366.
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2000US-02346359.
2000US-0236359.
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87.5%;
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87.5%;
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Pred. No.
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Pred.
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16;
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Search completed: January 10, Job time : 36 secs

2003, 09:38:22

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Query Match
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26-MAY-2000;
30-JUN-2000;
                                                                                                                                 The present invention relates to novel single exon nucleic acid probes (see Aa100010-AA110067). The present sequence is a peptide encoded by one such probe. The probes are useful for measuring human gene expression in a human breast sample, where the probe hybridises at high stringency to a nucleic acid expressed in the human breast. The probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human breast, particularly those diseases with polygenic actiology. The diseases include: breast cancer, disorders of development, inflammatory diseases of the breast, fibrocystic changes, proliferative breast diseases, proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                            03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                             Note: The sequence data for this patent did not form specification, but was obtained in electronic format
                                                      Sequence
                                                                                at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                             Claim 27;
                                                                                                                                                                                                                                                                                                       Novel single exon nucleic in a human breast -
                                                                                                                                                                                                                                                                                                                                                                          Penn
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                                                                                                                        breast disease and non-carcinoma tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200157270-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe; human; breast disease; breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide #3865 encoded by probe for measuring breast gene
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Similarity 7; Conserv
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2000US-0632366.
2000US-0234687.
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Score 33; DB Pred. No. 16; 1; Mismatches
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                                                                                                                                                                                                                                                                                                                  probe used to measuring gene expression
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Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq
    Issued_Patents_AA:*

1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1,
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                                                                                                                                                                                                                                                                                        Query
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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   2003, 09:37:15;
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         US-09-082-737-3

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US-09-399-913-55

US-09-98-27-737-2

PCT-US94-07297-39

US-07-717-331F-2

US-08-396-479B-2

US-08-134-001C-4589

US-09-134-001C-4589

US-09-134-001C-4589

US-09-134-001C-4589

US-09-134-001C-4589

US-09-135-526-4

US-09-302-620B-102

US-09-134-001C-499

US-09-134-011C-499

US-09-134-011C-499

US-09-134-011C-499

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US-09-329-884-14

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US-09-131-551-7
PCT-US94-07297-35
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21.577 Million cell updates/sec
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Compugen Ltd.
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US-08-394-021-7
                                       US-08-394-021-7
Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 7, Application US/08394021 Patent No. 5830634 GENERAL INFORMATION:
                                                                             INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 26 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: BRUST, Stefan
APPLICANT: KNAPP, Stefan
APPLICANT: GERKEN, Manfred
APPLICANT: GUERTLER, Lutz
                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Peptides derived from a retrovirus
                                                                                                                                                                                                                                                                                                                 STREET: 3000 K St.
CITY: Washington
STATE: D.C.
COUNTRY: USA
                                                                     LENGTH:
                                                TOPOLOGY:
                                                                                                           TELEX:
                                                                                                                   TELEFAX:
                                                           STRANDEDNESS:
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20007-5109
Similarity 100 7; Conservative
                                                                    amino acid
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ALIGNMENTS	US-08-964-308-15 US-08-964-313-4 US-08-964-313-14	US-08-806-959-2 US-08-964-308-4 US-08-964-308-14	US-08-330-1218-2 US-08-330-1218-3 US-08-852-807-20	US-08-118-270-36 PCT-US93-08528-36 US-08-208-007A-2 US-08-208-007A-7	US-09-318-794A-2 US-09-318-793A-4 US-08-240-783B-6 US-09-084-813-6 PCT-US92-09662-6
	Sequence 15, Appl Sequence 4, Appli Sequence 14, Appl	Sequence 2, Appli Sequence 4, Appli Sequence 14, Appl	20,	7236	Sequence 2, Appli Sequence 4, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/394,021

FILING DATE: 23-FEB-1995
CLASSIFICATION: 455
PRIOR APPLICATION DATA:
APPLICATION UMBER: DE P 44 05 810.1

FILING DATE: 23-FEB-1994
ATTORNEY/AGENT INFORMATION:
NAME: SANDEROCK, Colin G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W
                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 58
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
73.8%; Score 31; DB 100.0%; Pred. No. 6.5 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N.W.,
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                      DB 2;
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John H. C. Blasdale, Schering-Plough Corporation, M-3-W

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US-09-131-551-7
             Sequence 35, Application PC/TUS9407297
GENERAL INFORMATION:
APPLICANT: Arai, Naoko
APPLICANT: Masuda, Esteban S.
APPLICANT: Tokunitsu, Hiroshi
TITLE OF INVENTION: PURIFIED COMPONENTS OF MAMMALIAN
TITLE OF INVENTION: TRANSCRIPTION REGULATION COMPLEXES,
NUMBER OF SEQUENCES: 41
                                                                                                                                                                                                                                                                                                                            Matches
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Best Local :
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 58315/106/BEAK
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
TELEX: 904136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Peptides derived from a retrovirus TITLE OF INVENTION: the HIV group, and their use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: BRUST, Stefan
APPLICANT: KNAPP, Stefan
APPLICANT: GERKEN, Manfred
APPLICANT: GUERTLER, Lutz
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                                                                                                                                                                                                                                                 1111111
20 SSGKLIS 26
                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS
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                                                                                                                                                                                                                                                                                                                        Match 73.8%; Score 31; DB Local Similarity 100.0%; Pred. No. 6. 7; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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                                                                                                                                                                                                                                                                                    3 SSGKLIS 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      : 26 amino acids amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Foley & Lardner
3000 K Street, N.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BRUST, Stefan
KNAPP, Stefan
GERKEN, Manfred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/09/131,551
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                                                                                                                                                                                                                                                                                                                                                              DB 4; Length 26;
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                                     AND ANALOGS
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RESULT 4
US-09-082-737-3
; Sequence 3, Applicat
; Patent No. 6013500
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; MOLECULE TYPE:
PCT-US94-07297-35
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 201-822-739
TELEFAX: 201-822-7039
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 30-AUG-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/113,971
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 31,895
REFERENCE/DOCKET NUMBER: DX
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-822-7398
                                                                                                                                                        NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                        APPLICANT: Minden, Audrey
TITLE OF INVENTION: PAK4; A No. 6013500el Gene
TITLE OF INVENTION: Threonine Kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US 08/148,061
FILING DATE: 05-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 04-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: System Software 7.1 SOFTWARE: Microsoft Word 5.1a CURRENT APPLICATION DATA:
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APPLICATION NUMBER:
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MEDIUM TYPE: Floppy disk
                                                   COUNTRY: U
ZIP: 11230
                                                                                    STATE: New York
                                                                                                                                                                                                                                                                                                                                                                 :|||:::||
53 ESSGRIVSL 61
                                                                                                                                                                                                                                                                                                                                                                                                                            71.4%;
Local Similarity 55.6%;
les 5; Conservation
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STREET: Or
                                                                                                                      STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: Apple NOPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Madison
STATE: New Jei
                                                                                                                                          ADDRESSEE:
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                                                                                                                                                                                                                                                                              Application US/09082737
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140 amino acids
                                                                                                                      E: Cooper & Dunham LLP
1185 Avenue of the Americas
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                                                                    U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
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OPERATING SYSTEM: PC-DOS/MS-DOS

PatentIn

Release #1.0, Version #1.30

SOFTWARE:

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RESULT 6
US-09-399-913-53
; Sequence 53, Application US/09399913
; Patent No. 6361971
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                                                                                                                                                                 Query Match
Best Local Similarity
These 5; Conserv
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TYPE: PRT
ORGANISM: S. gorodnii
US-09-068-195-12
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Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                            SEQ ID NO 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Sanders, Jan W.
APPLICANT: Ledeboer, Adrianus M.
APPLICANT: Venema, Gerard
APPLICANT: Venema, Gerard
APPLICANT: Kok, Jan
TITLE OF INVENTION: Salt-Inducible Promoter Derivable from a Lactic Acid
TITLE OF INVENTION: Bacterium, and Its Use in a Lacctic Acid Bacterium for
TITLE OF INVENTION: Production of Desired Protein
FILE REFERENCE: Sanders-60113/025227
FILE REFERENCE: Sanders-60113/025227
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/068,195B
CURRENT FILING DATE: 1998-07-29
EARLIER APPLICATION NUMBER: PCT/EP97/04755
EARLIER FILING DATE: 1997-08-20
                                                                                                                                                                                                                                                                                                                                                            EARLIER APPLICATION NUMBER: EP 96202444/4
EARLIER FILING DATE: 1996-09-05
NUMBER OF SEQ ID NOS: 25
                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER APPLICATION NUMBER: EP 97200744/7 EARLIER FILING DATE: 1997-03-13
                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 250 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 05'
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/082,737
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acids
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                                                                                                                                                2 KSSGKLISL 10
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                                                                                                           KSSGKILKI 13
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55.6%;
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Pred. No.
                                                                                                                                                                                                Score 30; I
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                                                                                                                                                                                   Mismatches
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. 1e+02;
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                                                                                                                                                                                 Indels
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CURRENT APPLICATION NUMBER: US/09/399,913
CURRENT FILING DATE: 1999-09-21
EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER FILING DATE: 1998-11-30
EARLIER APPLICATION NUMBER: USSN 60/110,033
EARLIER FILING DATE: 1998-11-25
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER APPLICATION NUMBER: USSN 09/298,731
EARLIER APPLICATION NUMBER: USSN 09/298,731
EARLIER FILING DATE: 1999-04-23
EARLIER APPLICATION NUMBER: USSN 09/350,614
EARLIER APPLICATION NUMBER: USSN 09/350,614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
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Best Local Similarity
Trahes 5; Conserv
                                                                ; ORGANISM: Homo sapiens US-09-399-913-55
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US-09-399-913-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-399-913-55
                                                                                                                                                             SOFTWARE: PatentIn Ver. SEQ ID NO 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. SEQ ID NO 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 55, Appl Patent No. 636197
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION: APPLICANT: Rhodes,
                                                                                                                                                                                     EARLIER FILING DATE: 1999-07-09
NUMBER OF SEQ ID NOS: 73
SOFTWARE: DATEONER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EARLIER FILING DATE: 1999-04-23
EARLIER APPLICATION NUMBER: USSN 09/350,614
EARLIER FILING DATE: 1999-07-09
EARLIER APPLICATION NUMBER: USSN 09/350,874
EARLIER FILING DATE: 1999-07-09
NUMBER OF SEO ID NOS: 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/399,913
CURRENT FILING DATE: 1999-09-21
EARLIER APPLICATION NUMBER: USSN 60/110,277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER FILING DATE: 1998-11-30
EARLIER APPLICATION NUMBER: USSN 60/110,033
EARLIER FILING DATE: 1998-11-25
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER FILING DATE: 1998-11-20
EARLIER APPLICATION NUMBER: USSN 09/298,731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Ling, Huai-Ping
APPLICANT: An, Wengian
TITLE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
FILE REFERENCE: MNI-070CP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Betty, Maria APPLICANT: Ling, Huai-Ping APPLICANT: An, Wengian
                                                                                                                                                                                                                                                   EARLIER FILING DATE: 1999-07-09
EARLIER APPLICATION NUMBER: USSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Rhodes, Kenneth APPLICANT: Betty, Maria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: POTASS FILE REFERENCE: MNI-070CP2
                                                                                                                  LENGTH: 414
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 407
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  71.4%;
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Score 30;
Pred. No.
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Pred. No. 1.6e+02;
Pred. No. 1.6e+02;
                       Length 414;
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Matches

Conservative

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Mismatches

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Sequence 39, Application PC/TUS9407297

GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                           Matches
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APPLICANT: Minden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. C. Blasdale, Schering-Plough Corporation, M-3-W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 591 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 05
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                 TITLE OF INVENTION: TRANSCRIPTION REGULATION COMPLEXES, AND ANALOGS
                                                                                                                                                                  APPLICANT: Arai, Naoko
APPLICANT: Masuda, Esteban S.
APPLICANT: Tokumitsu, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION: NAME: White, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                        341 RSSGKLVAV 349
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                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: White, John P. REGISTRATION NUMBER: 28,678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/082,737 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
               COUNTRY:
                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
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                                                                                                                                                                                                                                                                                                                                                        2 KSSGKLISL 10
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07940-1000
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                                                                One Giralda Farms
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IVENTION: PAK4; A No. 6013500el Gene Encoding
IVENTION: Threonine Kinase
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                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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NO: 2:
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RESULT 10
US-07-717-331F-2
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                                                                                                                                                   STREET: 2...
STREET: 2...
CITY: Trumbull
CTATE: Connecticut
TCA
                                 SOFTWARE: Microsoft Word CURRENT APPLICATION DATA:
                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Yahwak & Associates
                                                                                                                                                                                                                                                                                                                     APPLICANT: June Nasrallah; Michael Nasrallah; and Joshua APPLICANT: Stein
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APPLICATION NUMBER: US 08
FILING DATE: 30-AUG-1993
                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 0
FILING DATE: 06-JUL-1993
ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 0
FILING DATE: 04-APR-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333 ESSGRIVSL 341
                                                                COMPUTER: Macinto OPERATING SYSTEM:
                                                                                                                                                                                               ADDRESSEE: Yanwa. ADDRESSEE: Yanwa. Street: 25 Skytop Drive
                APPLICATION NUMBER:
                                                                                                                                            ZIP:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: Apple Macintosh IIci
OPERATING SYSTEM: System Software 7.1
SOFTWARE: Microsoft Word 5.1a
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amino acid
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                                                                                                       Floppy Disk
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06-JUL-1993
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June 19th 1991
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                                                                      MS-DOS
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              US/07/717,331F
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Pred. No. 2.8e+02;
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US-08-396-479B-2
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Best Local (
                                                           Matches
                                                                                         Query Match
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                                                                                                                                                                                           TELEPHONE: (415) 494-8700
TELEFAX: (415) 494-8771
TELEX: 210 277299
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                   TOPOLOGY: 11
                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: A-59450-1/RAO TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 494-8700
                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Osman, Richard A
REGISTRATION NUMBER: 36,627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY NUMBER OF SEQUENCES: 18
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LENGTH: 857 amino acid
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552
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                                                          Local Similarity hes 5; Conserv
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                                                                                                                                                                   TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                   LENGTH:
                           2 KSSGKLISL 10
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                                                                                                                                                                 amino acid
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                                                                                                                                                                                  921 amino acids
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                                                          Conservative
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55.6%;
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75.0%;
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                                                                       Score 30; DB 1;
Pred. No. 3.7e+02;
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Pred. No. 3.5e+02;
                                                          Mismatches
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                                                                                     Length 921;
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                                                          Indels
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RESULT 13
US-09-134-001C-4589
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-818-823-2
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US-08-818-823-2
; ORGANISM: Staphylococcus epidermidis US-09-134-001C-4589
                                SEQ ID NO 4589
LENGTH: 127
TYPE: PRT
                                                                                                                                                                                                                                                                                                                              Sequence 4589, App. Patent No. 6380370
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                           CURRENT APPLICATION NUMBER: US/09/134,001C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/064,964 PRIOR FILING DATE: 1997-11-08 PRIOR APPLICATION NUMBER: US 60/055,779 PRIOR FILING DATE: 1997-08-14
                                                                                                                                                                                                                        APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: GTC-007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (415) 494-877
TELEX: 210 277299
INFORMATION FOR SEQ ID NO:
                                                                                           NUMBER OF SEQ ID NOS: 5674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: A:
TELECOMMUNICATION INFORMATION
TELEPHONE: (415) 494-8700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS
LENGTH: 921 amino acid
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NAME: Osman, Richard A
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CITY: San Francisco
STATE: California
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                               552 ESSGRIVSL 560
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FILING DATE: 02-MAR-1995
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Pred. No. 3.7e+02;
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RESULT 15
US-08-883-526-1
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US-08-825-780-3
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                                                                                                                                                                                           Query Match
Best Local S
Matches 6
Sequence 1, Application US/08883526
Patent No. 6033893
GENERAL INFORMATION:
APPLICANT: Bandman, Olga
APPLICANT: Guegler, Karl J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/08825780 Patent No. 5834238
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                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/825,780 FILING DATE: Filed Herewith
                                                                                                                                                                                                                                                                    IMMEDIATE SOURCE:
LIBRARY: GenBa
CLONE: 436564
                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 198 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: NOVEL FITTLE OF INVENTION: ROTEIN NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hillman, Jennifer L. APPLICANT: Shah, Purvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 31,
                                                                                                                                                                                             Local Similarity
nes 6; Conserv
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                                                                                                                                      23 KKSGKLVFL 31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: UZIP: 94304
                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
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                                                                                                                                                   2 KSSGKLISL 10
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                                                                                                                                                                                                                                                                                                                                            amino acid
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66.7%;
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75.0%;
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Pred. No. 1.3e+02;
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Pred. No. 81;
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В
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Best Local Similarity
Thes 5; Conserve
Search completed: January 10, 2003, 09:39:37 Job time: 16 secs
                                                                                                                                                                                            US-08-883-526-1
                                                                                                                                                                                                                                                                                                                                                                                  NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                        TOPOLOGY: linea IMMEDIATE SOURCE: LIBRARY: THYMNO CLONE: 347021,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/883,526 FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 334 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: NEW HUMAN CATHEPSIN NUMBER OF SEQUENCES: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Corley, Neil C. APPLICANT: Shah, Purvi
                                                            153 RKTGKLVSL 161
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                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                           TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive
                                                                                             2 KSSGKLISL 10
                                                                                                                                                                                                                                                                                      H: 334 amino acids amino acid
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                                                                                                                                            69.0%;
55.6%;
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                                                                                                                                            Score 29; DB 3;
Pred. No. 2.1e+02
                                                                                                                             Mismatches
                                                                                                                                                           DB 3; Length 334;
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
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19.401 Million cell updates/sec
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42
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: //cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep: *
    //cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep: *
    //cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep: *
    //cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep: *
    //cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep: *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

19	18	17	16	15	14	13	12	11	10	9	8	7	0	G	4	ω	2	۲	Result
28	28	29	29	29	29	29	29	29	30	30	30	30	30	30	30	31	. 31	33	Score
66.7	66.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	71.4	71.4	71.4	71.4	71.4	71.4	71.4	73.8	73.8	78.6	Query Match Length
169	123	1189	779	334	334	313	201	69	3241	927	414	407	364	362	238	93	26	38	
10	10	9	10	10	9	10	10	10	10	10	10	10	10	φ	10	10	12	10	DB
US-09-865-159-12	US-09-865-159-4	US-09-738-626-4140	US-09-749-601A-12	US-09-529-063-1	US-10-028-072-12	US-09-755-017-2	US-09-925-300-1357	US-09-864-761-34136	US-09-841-786-1	US-09-841-786-3	US-09-350-874-55	US-09-350-874-53	US-09-864-761-33528	US-09-870-759-80	US-09-864-761-33527	US-09-925-297-749	US-10-000-321-7	US-09-864-761-37171	ID
Sequence 12, Appl	Sequence 4, Appli	Sequence 4140, Ap	12,	Sequence 1, Appli	Sequence 12, Appl	Sequence 2, Appli	Sequence 1357, Ap	Sequence 34136, A	Sequence 1, Appli		Sequence 55, Appl	Sequence 53, Appl	Sequence 33528, A	Sequence 80, Appl	Sequence 33527, A	Sequence 749, App	Sequence 7, Appli	Sequence 37171, A	Description

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
589	541	540	513	512	502	462	461	433	407	382	361	356	329	329	329	329	271	200	175	175	175	175	175	175
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US-09-771-382-3	US-09-771-382-34	US-09-771-382-33	US-09-771-382-24	US-09-771-382-23	US-09-771-382-27	US-09-771-382-36	US-09-771-382-35	US-09-771-382-26	771-	771-	US-09-925-300-1693	US-09-771-382-37	US-10-114-464-7	US-10-114-464-2	US-09-953-956-7	US-09-953-956-2	US-09-738-626-3633	US-09-738-626-6498	US-10-052-586-424	US-09-978-189-452	US-09-999-832A-452	US-09-978-192A-452	US-09-978-697-452	US-09-978-295A-452
Sequence 3, Appli	34,	Sequence 33, Appl	Sequence 24, Appl	Sequence 23, Appl	Sequence 27, Appl	Sequence 36, Appl	•			Sequence 38, Appl	Sequence 1693, Ap	37,	7,		Sequence 7, Appli	Sequence 2, Appli	•		•	Sequence 452, App	•	-	•	Sequence 452, App

ALIGNMENTS

RESULT 1
US-09-864-761-37171
Sequence 37171 Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:

APPLICANT: Penn, Sharton G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-X-1
CURRENT PILLING DATE: 2001-05-23
CURRENT FILLING DATE: 2000-05-04
PRIOR APPLICATION NUMBER: US 60/207, 456
PRIOR PRICIA DATE: 2000-05-26
PRIOR FILLING DATE: 2000-05-26
PRIOR FILLING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 69/632, 366
PRIOR FILLING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US 60/236, 359
PRIOR APPLICATION NUMBER: DCT/USO1/0066
PRIOR FILLING DATE: 2000-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/0066
PRIOR FILLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/0066
PRIOR PRIOR APPLICATION NUMBER: PCT/USO1/0066
PRIOR APPLICATION NUMBER: PCT/USO1/0066
PRIOR FILLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR APPLICAT

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 7, Application US Patent No. US20020123039A1 GENERAL INFORMATION:
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LENGTH: 38
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PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
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PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
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les 7; Conserv
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                                                   APPLICATION NUMBER: US/10/000,321
FILING DATE: 04-Dec-2001
CLASSIFICATION: -UNKNOWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/131,551
FILING DATE: - CUNKNOWN>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: BRUST, Stefan
KNAPP, Stefan
GERKEN, Manfred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US01/00670 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GUERTLER, Lutz
TITLE OF INVENTION: Peptides derived from a retrovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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                                   NAME:
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                                SANDERCOCK,
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87.5%;
COCK, Colin G.
NUMBER: 31,298
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ED IN BY4/4, SIGNAL = 0.93
ED IN LUNG, SIGNAL = 1.1
ED IN HELA, SIGNAL = 0.86
ED IN ADULT LIVER, SIGNAL = 1.3
ED IN BRAIN, SIGNAL = 1.3
ED IN BRAIN, SIGNAL = 0.92
ED IN PLACENTA, SIGNAL = 0.92
ED IN BONE MARROW, SIGNAL = 0.92
ED IN HBLIOO, SIGNAL = 0.77
ED IN FETAL LIVER, SIGNAL = 0.77
ED IN FETAL LIVER SIGNAL = 0.77
ED IN FETAL SIGNAL = 0.77
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RESULT 4
US-09-864-761-33527
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                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K
APPLICANT: Chen, Wensheng
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PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 928
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 749
                                                                                                                                                                                                                                                                          Sequence 33527, Application US/09864761 Patent No. US20020048763A1
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                                                                                                                                 APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Mensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                          FILE REFERENCE: Acomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
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PRIOR APPLICATION NUMBER: US 60/180,312 PRIOR FILING DATE: 2000-02-04 PRIOR APPLICATION NUMBER: US 60/207,456 PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/US00/05989 PRIOR FILING DATE: 2000-03-08
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TYPE: PRT
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INFORMATION FOR SEQ ID NO: 7:
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nes 6; Conserva
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Pred. No. 11;
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? FILING DATE:
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? FILING DATE:

NUMBER: 2000-10-04 2000-08-03

APPLICATION NUMBER:

60/236,359 24263.6

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RESULT 5
US-09-870-759-80
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; OTHER INFORMATION:
US-09-864-761-33527
                                                                                                                                                                                                                                            В
Sequence 80, Application US/09870759
Patent NO. US20020177551A1
GEMERAL INFORMATION:
APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
FILE REFERENCE: 870759
CURRENT APPLICATION UNMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
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Best Local :
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LENGTH: 238
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PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
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TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
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APPLICATION NUMBER: PCT/US01/00661
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00670
FILING DATE: 2001-01-30
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00663
FILING DATE: 2001-01-30
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APPLICATION NUMBER: PCT/US01/00664
FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                            RSSGRVVSL
                                                                                                                                                                                                                                                                                                                      Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                      Conservative
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SWISSPROT
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EXPRESSED IN BT474, SIGNAL =
EXPRESSED IN HBL100, SIGNAL =
                                                                                                                                                                                                                                                                                                                                      71.4%; 55.6%;
                                                                                                                                                                                                                                                                                                                                                                                                              ED IN HBLIOO, SIGNAL = 3.4

ED IN HELA, SIGNAL = 1.9

ED IN ADULT LIVER, SIGNAL = 1.9

ED IN PLACENTA, SIGNAL = 1.5

ED IN PETAL LIVER, SIGNAL = 2.6

ED IN LUNG, SIGNAL = 2.6

ED IN LUNG, SIGNAL = 2.2

ED IN BRAIN, SIGNAL = 9.2

ED IN BRAIN, SIGNAL = 9.2

ED IN HEART, SIGNAL = 2.5

AN HIT: BF346321.1, EVALUE 5.00e-62

AN HIT: AW390205.1, EVALUE 3.00e-30

OT HIT: Q01105, EVALUE 3.00e-39
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                                                                                                                                                                                                                                                                                                                                    Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                      Mismatches
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49;
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US-09-864-761-33528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR PPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: DCT/US01/00666
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PRIOR FILING DATE: 2000-05-30
NUMBER OF SEQ ID NOS: 166
SOFTWARE: PatentIn version 3.1
SEQ ID NO 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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Matches
SEQ ID NO
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                                                                                                                                               PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR PRIOR DATE: 2000-09-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Penn, Sharron
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PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
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CURRENT FILING DATE: 2001-05-23
                    NUMBER OF SEQ ID N
SOFTWARE: Annomax
                                                                                          PRIOR APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/US01/00661 PRIOR FILING DATE: 2001-01-30
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PRIOR APPLICATION NUMBER: PCT/US01/00668
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PRIOR APPLICATION NUMBER: PCT/US01/00669
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                                                                      PRIOR FILING DATE:
                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/US01/00670
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TYPE: PRT
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APPLICATION NUMBER: PCT/US01/00663
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PCT/US01/00665
                                                                                                                                          APPLICATION NUMBER: US 09/608,408
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US01/00662
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77.8%;
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Pred. No.
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CURRENT APPLICATION NUMBER: US/09/350,874
CURRENT FILING DATE: 1999-07-09
EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER FILING DATE: 1998-11-30
EARLIER APPLICATION NUMBER: USSN 60/110,033
EARLIER FILING DATE: 1998-11-25
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-12-20
EARLIER FILING DATE: 1998-12-20
EARLIER FILING DATE: 1999-04-23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 53
                                                                                                                                                                                                                                                                                                                                                                                        ; LENGTH: 407
; TYPE: PRT
; ORGANISM: Rattus sp
US-09-350-874-53
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US-09-350-874-55
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; OTHER INFORMATION:
US-09-864-761-33528
GENERAL INFORMATION:
APPLICANT: Rhodes, Kenneth
APPLICANT: An, Menqian
TITLE OF INVENTION: METHODS FOR TREATING CARDIOVASCULAR DISORDERS
'FILE REFERENCE: MNI-069
CURRENT APPLICATION NUMBER: US/09/350,874
                                                                                                                 Sequence 55, Application US/09350874 Patent No. US20020019020A1
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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Best Local
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APPLICANT: An, Wengian
TITLE OF INVENTION: METHODS FOR TREATING CARDIOVASCULAR DISORDERS
FILE REFERENCE: MNI-069
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les 5; Conserv
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EST_HUMAN
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EXXPRESSED IN HELA, SIGNAL = 2

EXPRESSED IN BT474, SIGNAL = 4.6

EXPRESSED IN ADULT LIVER, SIGNAL = EXPRESSED IN HEART, SIGNAL = 1.6
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55.6%;
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ED IN FETAL LIVER, SIGNAL = 3.1

ED IN LUNG, SIGNAL = 2.7

ED IN BRAIN, SIGNAL = 3.5

ED IN BONE MARROW, SIGNAL = 3.1

ED IN HBL100, SIGNAL = 4.9

ED IN HBL100, SIGNAL = 3.00e-37

ED IN HBL100, SIGNAL = 4.9
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Pred. No. 79;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                Score 30; DB Pred. No. 89;
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TYPE: PRT
; ORGANISM: Fusobacterium necrophorum
US-09-841-786-3
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EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER FILING DATE: 1998-11-30
EARLIER FILING DATE: 1998-11-35
EARLIER FILING DATE: 1998-11-25
EARLIER FILING DATE: 1998-11-25
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1999-04-23
EARLIER FILING DATE: 1999-04-23
EARLIER FILING DATE: 1999-04-23
EARLIER FILING DATE: 1999-04-23
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                                                                                                                                                                                                               Sequence 1, Application US/09841786 Patent No. US20020054883A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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Best Local
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Best Local
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TITLE OF INVENTION: RECOMBINANT FUSOBACTERIUM NECROPHORUM LEUKOTOXIN TITLE OF INVENTION: VACCINE AND PREPARATION THEREOF FILE REFERENCE: 30296
CURRENT APPLICATION NUMBER: US/09/841,786
CURRENT FILING DATE: 2001-04-24
                                                                                                     APPLICANT: NAGARAJA, T. G.
APPLICANT: STEWART, GEORGE C.
APPLICANT: NARAYANAN, SANJEEV
APPLICANT: CHENGAPPA, M. M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 09/558,257
PRIOR FILING DATE: 2000-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: NAGARAJA, T. G. APPLICANT: STEWART, GEORGE C.
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TYPE: PRT
                                                                                                                                                                                                                                                                                                                                               129
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                                                                                                       NARAYANAN, SANJEEV K. CHENGAPPA, M. M.
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Pred. No. 2.2e+02;
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; TYPE: PRT
; ORGANISM: Fusobacterium necrophorum
US-09-841-786-1
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US-09-864-761-34136
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APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-X-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 09/558,257
PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 15
                                               NUMBER OF SEQ ID NOS: 49117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/180,312 PRIOR FILING DATE: 2000-02-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver. 2.1
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NO 34136
TH: 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US01/00667
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 2000-09-27
APPLICATION NUMBER: PCT/US01/00666
                                                                                           FILING DATE: 2000-06-30
APPLICATION NUMBER: US 09/774,203
                                                                                                                                 APPLICATION NUMBER: US 09/608,408
                                                                                                                                                   FILING DATE: 2000-09-21
                                                                                                                                                                       APPLICATION NUMBER: US 60/234,687
                                                                                                                                                                                         FILING DATE: 2001-01-30
                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US01/00670
                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                               APPLICATION NUMBER: PCT/US01/00661
                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US01/00662 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US01/00663 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: PCT/US01/00668
                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US01/00669 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 60/236,359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 2000-1
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                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US01/00665
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5; Conserv
                                   Annomax Sequence Listing Engine vers.
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55.6%;
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Pred. No.
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RESULT 12
US-09-925-300-1357
; Sequence 1357, Application
; Patent No. US20020151681A1
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US-09-755-017-2
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Thes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-300-1357
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SEQ ID NO 1357
LENGTH: 201
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Best Local
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Patent No. US20010034438A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: PA101
CURRENT APPLICATION NUMBER: US/09/925,300
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05988
PRIOR FILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
                                                                                        APPLICANT:
APPLICANT:
                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Craig Rosen, APPLICANT: Steve Ruber
                                                                                                                                                             APPLICANT: Walke, D. Wade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Nucleic Acids, Proteins and
                     TITLE OF INVENTION:
                                                        APPLICANT:
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f: Abuin, Alejandro
F: Zambrowicz, Brian
T: Sands, Arthur T.
INVENTION: No. US20010034438A1el Human Membrane Proteins
INVENTION: Polynucleotides Encoding the Same
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Turner, C. Alexander
Friedrich, Glenn
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ED IN HEART, SIGNAL = 3.3

ED IN HEART, SIGNAL = 2.4

ED IN HEART, SIGNAL = 2.1

ED IN BOAP MARROW, SIGNAL = 2.7

ED IN FETAL LIVER, SIGNAL = 2.4

ED IN HELA, SIGNAL = 2.2

ED IN HELA, SIGNAL = 2.2

ED IN ADULT LIVER, SIGNAL = 2.5

ED IN ADULT LIVER SIGNAL = 2.5
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Pred. No.
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Pred.
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LUNG, SIGNAL = 2.8
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CURRENT APPLICATION NUMBER: US/09/755,017
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: US 60/175,764
PRIOR FILING DATE: 2000-01-12
NUMBER OF SEQ ID NOS: 3
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 313
TYPE: PAT
ORGANISM: Homo Sapien
US-09-755-017-2
                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/028,072
CURRENT FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR FILING DATE: 1997-06-26
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059113
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059117
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US-10-028-072-12
Sequence 12, Application US/10028072
Publication No. US20030004311A1
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APPLICANT: Beresini, Maure.
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Elle
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                  APPLICATION NUMBER: 60/059122
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059184
FILING DATE: 1997-09-17
                                                                                                                                                                                                             APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
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APPLICATION NUMBER: 60/062250
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Desnoyers, Luc
Filvaroff, Ellen
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Wood, William
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Godowski, Paul J.
Gurney, Austin L.
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OR APPLICATION NUMBER: 60/088810
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OR APPLICATION NUMBER: 60/088858
OR FILING DATE: 19/98-06-11
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FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085697
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APPLICATION NUMBER: 60/085149
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PRIOR APPLICATION NUMBER: 60/091519
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hypothetical protein F1019.5 [imported] - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Decies: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001 C;Accession: F96693 R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alon Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000 A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marzia Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallo ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712 heat shock protein 90 homolog precursor - barley
N;Alternate names: GRP94 protein homolog
C;Species: Hordeum vulgare (barley)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 20-Aug-1999
C;Accession: S3353; S31862
R;Walther-Larsen, H:, Brandt, J.; Collinge, D.B.; Thordal-Christensen, H:
Plant Mol. Biol. 21, 1097-1108, 1993
A;Title: A pathogen-induced gene of barley encodes a HSP90 homologue showing striking
A;Reference number: S33533; MUID:93257625; PMID:8490130
A;Accession: S33533 A;Cross-references: EMBL:X67960; NID:g22651; PIDN:CAA48143.1; PID:g22652 C;Superfamily: heat shock protein 90 C;Keywords: glycoprotein RESULT 2 S33533 A; Molecule type: mRNA A; Residues: 1-809 <WAL> B δÃ C; Genetics: A; Gene: F1019.5 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-763 <STO> A; Map A;Cross-references: GB:AE005173; NID:g9755448; PIDN:AAF98209.1; GSPDB:GN00141 Best Matches position: 1 477 Local 2 KSSGKLISL 10 KNSGKLISL 485 Similarity 8; Conser Conservative 88.1%; Score Pred. 1; Mismatches 37; 9 DB 2, 0; Length 763 Indels 0; Gaps H.; Tallo 0; Dewar, Marzia Kin, Alon

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hypothetical protein CAC0064 [importeu]

C;Species: Clostridium acetobutylicum
C;Date: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 14-Sep-2001
C;Accession: G96907
R;Rolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, K.S.; Zeng, Q.; Gib.
J Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R.
J. Bacteriol. 183, 4823-4838, 2001
A;Title: Genome Sequence and Comparative Analysis of the Solvent-Producing
A;Title: Genome Sequence and Comparative Analysis of the Solvent-Producing
A;Gene: cycA C;Complex: tightly bound to the photosynthetic reaction center complex C;Function:
A;Bescription: electron donor to photooxidized P840 of the photosynthetic reaction C;Superfamily: Chlorobium photosynthetic reaction center cytochrome c551 C;Superfamily: chlorobium photosynthetic reaction center cytochrome c551 (c;Seywords: chromoprotein; electron transfer; heme; iron; metalloprotein; photosynte;1-206/Product: photosynthetic reaction center cytochrome c551 #status experimenta F;1-9/Domain: intracellular #status predicted <INT> F;10-32/Domain: transmembrane #status predicted <FER1> F;3-48/Domain: transmembrane #status predicted <FER1> F;49-67/Domain: trans
                                                                                                                                                                                                                                                                                                                         A;Cross references: GB:M95751; NID:g144472; PIDN:AAA23110.1; PID:g144473
A;Experimental source: f. thiosulfatophilum 8327
A;Note: sequence extracted from NCBI backbone (NCBIN:116201, NCBIP:116202)
A;Note: part of this sequence, including the amino end of the mature protein,
A:Note: authors predicted the Met axial ligand based on its predicted location
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J. Biol. Chem. 267, 21139-21145, 1992
A;Title: A membrane-bound monoheme Cy
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C;Date: 10-Jun-1993 #sequence_revision
C;Accession: A45079
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F;21-809/Product: heat shock protein 90 homolog #status predicted
F;111,410,450,617/Binding site: carbohydrate (Asn) (covalent) #status
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C; Genetics:
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A; Residues: 1-206 < OKK>
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A; Residues: 1-88 < KUR>
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A; Residues: 1-559 <BEV>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Accession: T23056
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A;Map position: 4
A;Introns: 27/2; 113/3; 182/3; 266/2; 374/3; 462/3;
C;Superfamily: NADH dehydrogenase
                                                                                                                                                                                                                                                                                                                        T09038

NADH dehydrogenase (ubiquinone) chain NDI1 homolog F26K10.100 - Arabidopsis C;Species: Arabidopsis thallana (mouse-ear cress)
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 11-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;78-95/Domain: transmembrane #status predicted <TM3>F;96-206/Domain: periplasmic #status predicted <PER2>F;96-206/Domain: periplasmic #status predicted <PER2>F;152,155/Binding site: heme (Cys) (covalent) #status F;156,182/Binding site: heme iron (His, Met) (axial 1.
                                                                                                                                                               A;Cross-references: EMBL:AL049803; ATSP:F26K10.100; A;Experimental source: cultivar Columbia; BAC clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Introns: 44/1; 91/3; 170/3; 377/3; 494/3; 1046/2; C; Superfamily: CHD-1 protein; chromobox homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       submitted to the EMBL Data A; Reference number: 219665 A; Accession: T23056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein H06001.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 31-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Residues: 1-1465 <WIL>
A; Cross-references: EMBL: Z92970;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary; translated from GB/EMBL/DDBJ
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 Conservative
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66.7%;
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77.8%;
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Pred. No.
                 Pred.
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); Mismatches
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2: Mismatches
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red. No. 49;
Mismatches
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F26K10
                                   Length 559,
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h+-transporting ATP synthase, chain I (atpi) PAB1180 - Pyr CC:Species: Pyrococcus abyssi
C:Species: Pyrococcus abyssi
C:Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_C
C:Accession: A75029
R;anonymous, Genoscope
submitted to the EMBL Data Library, July 1999
A:Description: Pyrococcus abyssi genome sequence: insights
A:Reference number: A75001
A:Recession: A75001
A:Recession: A75002
A:Status: preliminary
A;Molecule type: DNA
A:Residues: 1-659 < KANP
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A; Start codon: (
C; Superfamily: :
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Plasmid 29, 165-179, 1993
A;Title: RepFIB: a basic replicon of large plasmids.
A:Reference number: I40787; MUID:93361574; PMID:8356112
A;Accession: I40787
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-325 < RES>
A;Residues: 1-325 < RES>
    replication protein A - Escherichia coli plasmid ColV c;Species: Escherichia coli C;Date: 16-Aug-1996 #sequence_revision 16-Aug-1996 #t. C;Accession: I40788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R; Perez-Casal, J.F.; Gammie, A.E.; Crosa, J.H.
J. Bacteriol. 171, 2195-2201, 1989
A;Title: Nucleotide sequence analysis and expression of the A;Reference number: A32842; MUID:89197795; PMID:2703470
A;Accession: A32842
A;Molecule type: DNA
A;Residues: 25-325 <PER>
A;Residues: 25-325 <PER>
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C;Date: 16-Aug-1996 #sequence_revision 16-Aug-1996 #text_change C;Accession: I40787; A32842
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C;Genetics:
A;Gene: repA
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A;Experimental source: plasmid Colv3-K30
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66.7%;
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77.8%;
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Pred. No.
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A;Genome: plasmid
C;Superfamily: repA
C;Keywords: plasmid
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A; Molecule type: I
A; Residues: 1-325
C; Genetics:
                                                                                                                                                        replication protein RepFIB (P307 replicon) - Escherichia coli plasmid IncF C;Species: Escherichia coli C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 21-Aug-199
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A; Start codon: GTO
C; Superfamily: rep
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C;Date: 16-Aug-1996 #sequence_revision 16-Aug-1996 #text_change
C;Accession: 140829
R;Gibbs, M.D.; Spiers, A.J.; Bergquist, P.L.
Plasmid 29, 165-179, 1993
A;Title: RepFIB: a basic replicon of large plasmids.
A;Reference number: 140787; MUID:93361574; PMID:8356112
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A; Residues: 1-325 < RES>
A; Cross-references: GB:L01250;
                                                               A; Title: Nucleotide sequence and A; Reference number: A32310; MUID:
                                                                                                      R;Saul, D.; Spiers, A.J.; McAnulty, J.; Gibbs, M.G.; J. Bacteriol. 171, 2697-2707, 1989
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A; Residues: 1-325 < RES>
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C;Superfamily: repA protein
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A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                      A; Accession: A32310
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A;Experimental source: plasmid ColvBtrp
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                                                                                                                                                                                                                                                                                       KSSGELVTL 11
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6; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTG
                                                                                                                                                                                                                                                                                                                                                                                                                                 repA
                                                                                                                                                                                                                                                                                                                                                            Conservative
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                    <SAU>
                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                         76.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       76.2%;
66.7%;
                                                                    e and replication characteristics MUID:89213960; PMID:2651415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NID:g144697; PIDN:AAA71880.1; PID:g144698 CO1V
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Pred. No.
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                                                                                                                       Bergquist,
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                                                                                         of,
                                                                                         RepFIB, a basic repli
                                                                                                                         P.L.; Hill, D.F.
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                                                                                                                                                            21-Aug-1998
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protein copy control

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A;Description: involved in preventing fertilization between plants having the same: C;Superfamily: S-receptor kinase; protein kinase homology; S-locus-specific glycoprote; C;Keywords: ATP; glycoprotein; magnesium; phosphotransferase; receptor; serine/three; F;1-31/Domain: signal sequence (fragment) #status predicted <SIG>F;32-856/Product: S-receptor kinase 12 #status predicted <MAT>F;42-436/Domain: S-locus-specific glycoprotein homology <SSG>F;44-436/Domain: transmembrane #status predicted <TMM>F;526-812/Domain: protein kinase homology <KIN>F;526-812/Domain: protein kinase ATP-binding motif F;48,79,123,217,247,317,392/Binding site: carbohydrate (Asn) (covalent) #status predicted F;555,571,652,654/Active site: Lys, Glu, Asp, Lys #status predicted F;557,661/Binding site: magnesium (Asn, Asp) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S.; Shinagawa, H.
DNA Res. 5, 1-9, 1998
DNA Res. 5, 1-9, 1998
A;Title: Complete nucleotide sequences of 93-kb and 3.3-kb
A;Reference number: Z14127; MUID:98290540; PMID:9628576
A;Accession: T00233
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                    R:Yamakawa, S.; Watanabe, M.; Hinata, K.; Suzuki, A.; Isogai, Biosci. Biotechnol. Biochem. 59, 161-162, 1995
A;Title: The sequences of S-receptor kinase (SRK) involved in A;Reference number: JC2481, MUID:95201375; PMID:7765971
A;Accession: JC2482
                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-856 < YAM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S-receptor kinase (EC 2.7.1.-) 12 precursor - field mustard (fragment) N;Alternate names: receptor protein kinase K, SRK12 C;Species: Brassica campestris (field mustard)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
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C; Accession: T00233
                                                                                                                                                                                                                                                               C; Function:
                                                                                                                                                                                                                                                                              A; Note: locus is highly polymorphic
                                                                                                                                                                                                                                                                                                      A;Gene:
                                                                                                                                                                                                                                                                                                                           C; Genetics:
                                                                                                                                                                                                                                                                                                                                               A; Cross-references: DDBJ:D38564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Date: 22-Apr-1995 #sequence_revision
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Genome:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Gene: repFIB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:AB011549; A;Experimental source: strain EHEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Residues: 1-325 <MAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R; Makino, K.; Ishii, K.; Yasunaga, T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Species: Escherichia coli
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Matches 6
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity 6; Conser
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Pred.
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Pred. No.
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O157:H7, substrain
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Mismatches
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No.
                                                                                                                                                                                                                                                                                                                                                                                                                              e (SRK) involved in self-incompatibility and PMID:7765971
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47;
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                                                                                                                      A; Gene: CESP:F33G12.2
A; Introns: 26/1; 82/1;
                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-286 < NHA>
                                                                                                                                                                                                                               A; Reference number: A; Accession: T16241
                                                                                                                                                                                                                                                          submitted to the EMBL Data Library, November 1995 A; Description: The sequence of C. elegans cosmid F33G12
                                                                                                                                                                                                                                                                                                         hypothetical protein F33G12.2 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999 C;Accession: T16241
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R; Nelson, K.E.; Clayton, Garrett, M.M.; Stewart,
                                                                                                                                                                                                              A; Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                             R; Nhan, M.
                                                                                                                                                                                                                                                                                                                                                                     T16241
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
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A; Title: Evi
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Best Local Similarity
""" 6; Conserv
                                                                                                                                                                  A;Cross-references: EMBL:U41278; NID:g1086899; PID:g1086900; PIDN:AAA82480.1; CESP:F3
                                                                                                                                                                                                 A; Molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Reference number: A72200;
A;Accession: F72214
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Date: 11-Jun-1999 *sequence_revision 11-Jun-1999 *text_change 21-Jul-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: GB:AE001814;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-218 <ARN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary
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                                                                                                                                                      Genetics
                                                            Matches
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Best Local
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192 KSSGKLLA 199
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442 KANGKIISL 450
                                                                            Local
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                            2 KSSGKLIS
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                                                           Similarity 6; Conserv
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                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lateral gene transfer between Archaea 72200; MUID:99287316; PMID:10360571
                                                                                                                      156/3; 200/2; 235/2
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                                                                           73.8%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73.8%;
77.8%;
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66.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gill, S.R.; (Cotton, M.D.;
                                                            2:
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Pred. No. 52;
1; Mismatches
                                                                                    Score 31;
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Pred. No.
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                                                            Mismatches
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No.
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No. 52;
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EFTU_YEAST
PAK4_HUMAN
SRK6_BRAOLI
NEC2_HUMAN
APTC1_CHICK
Y450_METJA
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P42426
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1 escherichia
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9 escherichia
7 escherichia
                                homo sapien
rattus norv
escherichia
streptococc
lotus japon
saccharcomyc
homo sapien
brassica ol
homo sapien
gallus gall
methanococc
homo sapien
                                                                                                                                                                                                                                                                                                                                                                    antirrhinum
haemophilus
schizosacch
catharanthu
ovis an
gallus
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sulfolobus
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                                                                                                                                                                                                                                                                              cricetulus
                                                                                                                                                                                                                                                                                                                                                                                                                                            salmonella
; aries
.us gall
P36183;
01-JUN-1994
01-JUN-1994
01-FEB-1995
                                                                      Chaperone;
Signal.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hordeum vulgare (Barley).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnaliophyta; Liliopsida; Poales; Poaceae; Pooldea
Triticeae; Hordeum.
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(Rel. 29, Last sequence up
(Rel. 31, Last annotation)
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P54641 dictyosteli	VAOD_DICDI	Ъ	356	69.0	29	0
	CSL2_HUMAN	Н	334	69.0	29	9
	CATL_PIG	_	334	69.0	29	8
P25975 bos ta	CATL_BOVIN	ш	334	69.0	29	7
P58173 homo sapien	O2B6_HUMAN	L	313	69.0	29	6
P25859 arabid	CC2B_ARATH	_	309	69.0	29	G
P18543 fremye	PYR2_FREDI	\vdash	249	69.0	29	4

ALIGNMENTS

precursor (GRP94 homolog)

update) on update)

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plant Mol. Biol. 21:1097-1108(1993).

-:- SUBCELLULAR LOCATION: Endoplasmic reticulum lumen.
-:- INDUCTION: ACCUMULATES RAPIDLY IN LEAVES UPON HEAT SHOCK TREATMENT AND DURING INFECTION BY A PATHOGEN.
-:- SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 90 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-CV. P-01; TISSUE-Leaf;
MEDLINE-93257625; PubMed-8490130;
Walther-Larsen H., Brandt J., Col
                                                                                                                                                                                      PROSITE; PS00014; ER_TARGET; 1. PROSITE; PS00298; HSP90; 1.
                                                                                                                                                                                                                                        pfam; pR00183; HSP90; 1.
pfam; pR00218; HATPASe_C; 1.
prints; pR00775; HEATSHOCK90.
SMART; SM00387; HATPASe_C; 1.
                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR003594; ATPbind_ATPase.
InterPro; IPR000886; ER_target.
InterPro; IPR001404; Hsp90.
                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; S31862; S31862.
PIR; S33533; S33533.
HSSP; P02829; 1AH8.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; X67960; CAA48143.1;
                                                                                                                                                              Endoplasmic
                                                                                                                                                           reticulum; Glycoprotein; Calcium-binding;
POTENTIAL.
ENDOPLASMIN HOMOLOG.
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MBL outstation -
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scheller H.V.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., AND SEQUENCE OF 1-33.
STRAIR of. thiosulfatophilum / NCIB 8327;
MEDLINE-93016035; PubMed-1383218;
Okkels J.S., Kjaer B., Hansson O., Svendsen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P42426;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation update)
                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                           EMBL; M95751;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     photosynthetic
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                                                                                                                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                                                                                                             EMBL; AB004459;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oh-Oka H
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                                                                                                                                                                                                                                                                                              InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "A membrane-bound monoheme cytochrome c551 of a nov immediate electron donor to P840 of the Chlorobium photosynthetic reaction center complex.";
J. Biol. Chem. 267:21139-21145(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=1098;
                                                                                                                                                                                                                                RANSMEM
                                                                                                                                                                                                                                                 ransmembrane
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FUNCTION: MONOHEME CYTOCHROME WHICH IS THE IMMEDIATE ELECTRON DONOR TO P840 OF THE PHOTOSYNTHETIC REACTION CENTER COMPLEX.
                     KSSGKLISL 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KSSGKLISL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 7; Conserv
                                                   Similarity 7; Conser
                                                                                                                                                                                                                                                              transport;
                                                                                                                                                                                                                                                                                 PS00190;
                                                                                                                                                                                                                                                                            IPR000345; CytC_heme_bind. S00190; CYTOCHROME_C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         thiosulfatophilum / Larsen;
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49
76
152
155
156
182
206
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806
809 ‡
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                                                     Conservative
                                                                                                                                                                                                                                                                                                                              AAA23110.1;
                                                                                                                   AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                             BAA20401.1;
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69
96
152
155
156
182
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809
92916
                                                                                                                                                                                                                                                                Photosynthesis; Reaction
                                                                                                                   22858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chlorobia;
                                                                      81.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.3%;
77.8%;
                                                                   . 88
                                                                                                                     M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MW.
                                                  Score 34; DB
Pred. No. 3.5;
2; Mismatches
                                                   2
                                                                                                                                                                                                POTENTIAL. POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 35;
Pred. No.
                                                                                                                               IRON
                                                                                                                                                               HEME
                                                                                                                                                                                                                                POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-LINKED (GLCNAC...) (POTENTIAL).
PREVENT SECRETION FROM ER.
79798FDBC15B44D0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chlorobiales; Chlorobiaceae;
                                                                                                                  563427E9BA74B82B
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                                                                                                                                                             (COVALENT) (BY SIMILARITY). (COVALENT) (BY SIMILARITY).
                                                               DB
3.5;
                                                                                                                               AXIAL LIGAND) (BY AXIAL LIGAND) (BY
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                                                                                Length 206
                                                                                                                   CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   novel type is the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moeller
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SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     R18E_SULTO
ID R18E_SA
AC Q96YW1
AC Q96YW1
DT 15-JUN
DT 15-JUN
DT 15-JUN
DT 15-JUN
DE 50S ri
GN RFL18E
OS SULf61
OC ArChae
OC NCBLT
OC NCBLT
RA SECUEN
RA KAWARA
RA SEKIAR
RA YOSHIZ
RA OSHIZ
RA 
                    ACC OCC OCC RRY RRC RRY
                                                                                                                                                                                                                                                             VATI_P
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Query Match
Best Local S
Matches 7
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VATI_PYRAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Complete genome sequence of an aerobic thermoacidophilic Crenarchaeon, Sulfolobus tokodaii strain7.";
DNA Res. 8:123-140(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kawarabayasi Y., Hino Y., Horikawa H., Jin-no K., Takahashi M., Sekine M., Baba S.-I., Ankai A., Kosugi H., Hosoyama A., Fukui S., Nagai Y., Nishijima K., Otsuka R., Nakazawa H., Takamiya M., Kato Y Yoshizawa T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi Aoki K.-I., Masuda S., Yanagii M., Nishimura M., Yamagishi A., Oshima T., Kikuchi H.;
STRAIN=GE5 / Orsay;
                              SEQUENCE FROM N.A.
                                                                                                               Archaea; Euryarchaeota;
                                                                                                                                         Pyrococcus abyssi.
                                                                                                                                                               V-type ATP synthase ATPI OR PAB1180.
                                                                                                                                                                                                       16-OCT-2001 (Rel. 40, 16-OCT-2001 (Rel. 40, 16-OCT-2001 (Rel. 40,
                                                                                                                                                                                                                                                                                 Q9UXU2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribosomal protein; SEQUENCE 118 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00256; L15; 1.
PROSITE; PS01106; RIBOSOMAL_L18E; FALSE_NEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AP000988; BAB67165.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q96YW1;
                                                                       NCBI_TaxID=29292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR001196; Ribosomal_L15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=21456156; PubMed=11572479;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RPL18E OR ST2066
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15-JUN-2002 (Rel. 41,
15-JUN-2002 (Rel. 41,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Archaea; Crenarchaeota;
                                                                                                                                                                                                                                                                                                                                                                                                                     92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 KSSGKLISL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4
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European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                   KSGGKVISL 100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SULTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Complete proteome 13335 MW; CE18B

    Last sequence update)
    Last annotation update)
    subunit I (EC 3.6.3.14) (V-type ATPase subunit I).

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78.6%;
77.8%;
                                                                                                                                                                                                                                                         Created)
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Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                      Thermococci;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Thermoprotei; Sulfolobales; Sulfolobaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 33; DB 1
Pred. No. 3.3;
1; Mismatches
                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CE18B01FE2F0B394 CRC64;
                                                                                                                      Thermococcales;
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                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                         Gibbs M.D., Spiers A.J., Bergquist P.L.;

"RepFIB: a basic replicon of large plasmids.";

Plasmid 29:165-179(1993).

-i- FUNCTION: THIS PROTEIN IS ESSENTIAL FOR PLASMID REPLICATION;

IS INVOLVED IN COPY CONTROL FUNCTIONS. IN VITRO, BINDS TO THE REPEAT UNITS, BCDD'D', EFG AND HIJ (BY SIMILARITY).

-i- SIMILARITY: HIGH, TO REPFIB REPLICON REPA PROTEINS FROM OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REP9_ECOLI
Q51651;
InterPro; IPR002584; RepA.
Pfam; PF01651; RepA; 1.
ProDom; PD003734; RepA; 1.
Plasmid; DNA replication;
SEQUENCE 325 AA; 37298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
RepFIB replication protein A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             structure and evolution.";
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: PRODUCES ATP FROM ADP IN THE PRESENCE OF I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ECOLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE=93361574; PubMed=8356112;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified and this statement is not removed.
                                                                             EMBL; L01250; AAA71880.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plasmid IncFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Pyrococcus abyssi genome sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
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CATALYTIC ACTIVITY: ATP + H(2)O + H(+)(In) =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Integral membrane
                                                                                                                                                                                                                                          SIMILARITY: HIGH, PLASMIDS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pro; IPR002490; V_ATPase_sub116.
PF01496; V_ATPase_sub_a; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  non-profit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 institutions as long as its content
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77.8%;
Plasmid copy control; DNA-binding MW; B7B0B7761A9327DB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        gamma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                           FUNCTIONS. IN VITRO, BINDS TO THE AND HIJ (BY SIMILARITY).
REPLICON REPA PROTEINS FROM OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                        subdivision;
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EMBL; EMBL; EMBL; EMBL;

L01255; AAA71885.1; L01256; AAA71886.1; M26308; AAB61762.1; AP001918; BAA97903.1;

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EG40046;

the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and foentities requires a license agreement (See http://www.isb-sib-entities requires a license agreement (See

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RESULT REPULT OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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SEQUENCE FROM N.A.
STRAIN=K12 / CR63; PLASMID=F;
STRAIN=K12 / CR63; PLASMID=F;
Shimizu H., Saitoh Y., Suda Y., Uehara K., Sampei G.,
"Complete nucleotide sequence of the F plasmid: its in organization and diversification of plasmid genomes."
Organization and diversification of plasmid genomes."
                                                                                                                                                                                                                                                        This SWI
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Plasmid F, Plasmid IncFI
Plasmid IncFI ColVBtrp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Spiers A.J., Bhana N., Bergquist P.L.; "Regulatory interactions between RepA, protein, and the DNA repeats of RepFIB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. PLASMID=IncFI P307; MEDLINE=89213960; P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gibbs M.D., Spiers A.J., Bergquist P.L.; "RepFIB: a basic replicon of large plasmids."; Plasmid 29:165-179(1993).
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PLASMID=IncFI pHH502, and IncFI ColVBtrp;
MEDLINE=93361574; PubMed=835612;

MEDLINE=93361574; PubMed=835612;
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Q1-NOV-1997 (Re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EXPRESSION REGULATION, AND DNA REPEAT MEDLINE=93308080; PubMed=8320218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Nucleotide sequence and replication basic replicon of IncF plasmids."; J. Bacteriol. 171:2697-2707(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteriol. 175:4016-4024(1993).
- FUNCTION: THIS PROTEIN IS ESSENTIAL FOR
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SIMILARITY: HIGH,
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                                                                                                                                                                                                                                                      SWISS-PROT entry is copyright. It is produced through een the Swiss Institute of Bioinformatics and the EM
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InterPro; IPR002584; RepA.
Pfam; PF01651; RepA; 1.
ProDom; PD003734; RepA; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gibbs M.D., Spiers A.J., Bergquist P.L.;
"RepFIB: a basic replicon of large plasmids.";
plasmid 29:165-179(1993).
-i- FUNCTION: THIS PROTEIN IS ESSENTIAL FOR PLASMID REPLICATION; 1
IS INVOLVED IN COPY CONTROL FUNCTIONS. IN VITRO, BINDS TO THE REPEAT UNITS, BCDD'D', EFG AND HIJ (BY SIMILARITY).
-i- SIMILARITY: HIGH, TO REPFIB REPLICON REPA PROTEINS FROM OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a license agreement (S or send an email to license@isb-sib.ch).
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Plasmid; DNA replication; Plasmid copy control; DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long modified and this statement is not removed.
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Bacteria; Proteobacteria;
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Best Local
                          This
                                                                                                              Gibbs M.D., Spiers A.J., Bergquist P.L.;
"RepFIB: a basic replicon of large plasmids.";
Plasmid 29:165-179(1993).
-i- FUNCTION: THIS PROTEIN IS ESSENTIAL FOR PLASMID REPLICATION;
IS INVOLVED IN COPY CONTROL FUNCTIONS. IN VITRO, BINDS TO THE
REPEAT UNITS, BCDD'D', EFG AND HIJ (BY SIMILARITY).
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Plasmid IncFIV R124, and Plasmid IncFI ColV3-K30.
Bacteria; Proteobacteria; gamma subdivision; Ente
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MEDLINE=93361574; PubMed=8356112;
                                                                                                                                                                                                                                                                                                                                                                                                                        Salmonella typhi, and Escherichia coli.
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01-NOV-1997
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-i- SIMILARITY: HIGH, TO REPFIB REPLICON REPA PROTEINS FROM OTHER
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MEDLINE=93361574; PubMed=8356112;
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entry is copyright. iss Institute of Bio:
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PROSITE; PS00107; PROTEIN_KINASE_ATP;
PROSITE; PS00108; PROTEIN_KINASE_ST;
                                                                                                                                                                                                                                                              InterPro; IPR000719; Euk_pkinase.
InterPro; IPR002290; Ser_thr_pkinase.
Pfam; PF00069; pkinase; 1.
ProDom; PD000001; Euk_pkinase; 1.
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      ; Cell division;
14 304
20 28
0108; PROTEIN_KINASE_ST; 1.
0011; PROTEIN_KINASE_DOM; 1.
Serine/threonine-protein kinase; ATP-binding;
Cell division; Mitcosis; Phosphorylation.
Cell division; MITCOSIS; PKOSPHORYLATION.
14 304 PROTEIN KINASE.
20 28 ATP (BY SIMILARITY).
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STRAIN-Rd / KW20 / ATCC 51907;
MEDLINE-95350630; PubMed-7542800;
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                                                                                                                                                                                                                                                                                                        entities requires a license agreement (so or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                      modified and this statement is not removed.
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between the Swiss Institute of Bioinformatics and the EMBL
the European Bioinformatics Institute. There are no restrict
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RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Gollias M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Gollias M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones M., Leather S., McDean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Mutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Wueller-Auer S.,
RA Gabel C., Fuchs M., Fritzc C., Holzer E., Moestl D., Hilbert H.,
RA Galibert F., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Calibert F., Aves S.J., Xiang Z., Hunt C., More K., Hurst S.M.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Carrutti L., Love T., McComble W.R., Paulsen I., Potashkin J.,
RA Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.;
"The genome sequence of Schizosaccharomyces pombe.";
RT Nature 415,871-880(2002).
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                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schar P., Baur M., Schneider C., Kohli J.;
"Mismatch repair in Schizosaccharomyces pombe requires the mutL homologous gene pms1: molecular cloning and functional analysis.";
Genetics 146:1275-1286(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _SCHPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=21848401; PubMed=11859360;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=97403304; PubMed=9258673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schizosaccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes; Schizosaccharomycetales; Schizosaccharomycetaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schizosaccharomyces pombe (Fission yeast).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA mismatch repair protein pmsl. pmsl OR SPAC19G12.02C.
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15-JUN-2002
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               ween the Swiss Institute of Bioini
European Bioinformatics Institute
by non-profit institute.
                                                                                                                                                                         SIMILARITY:
                                                                                                                                                                                                                                      FUNCTION: THIS
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(Rel. 41, Last annotation update)
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                                                                                                                                                                            BELONGS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45894
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                                   DNA MISMATCH REPAIR MUTL/HEXB FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    147C1DA2E9099008 CRC64;
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RESULT 13
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Best Local
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EMBL; Z97209; CAB10113.1; -.
HSSP; P23367; 1BKN.
InterPro; IPR003594; ATPbind_ATPase.
InterPro; IPR002099; DNA_mis_repair.
Pfam; PF01119; DNA_mis_repair; 1.
Pfam; PF02518; HATPase_c; 1.
TIGRFAMS; TIGR00585; MuLl; 1.
PROSITE; PS00058; DNA_MISMATCH_REPAIR_1; 1.
                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                           Schroeder G., Beck M., Eichel J., Vetter H.P., Schroeder J., "HSP90 homologue from Madagascar periwinkle (Catharanthus ros cDNA sequence, regulation of protein expression and location endoplasmic reticulum.", Plant Mol. Biol. 23:583-594(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1994
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Catharanthus roseus (Rosy periwinkle) (Madagascar periwinkle). Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids I; Gentianales; Apocynaceae; Rauvolfioideae;
                                                     PIR; S39558; S39558.
HSSP; P02829; 1AH8.
                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vinceae; Catharanthus.
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                          InterPro;
                                         InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=94033337; PubMed=8106014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=4058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           197
                                                                                                                                                                                                                                            SUBCELLULAR LOCATION: Endoplasmic reticulum lumen.
TISSUE SPECIFICITY: NOT DETECTED IN EXTRACTS FROM YOUNG
UNLESS THEY ARE EXPOSED TO HEAT SHOCK FOR SEVERAL HOURS.
FOUND TO BE CONSTITUTIVELY EXPRESSED IN CELL CULTURES.
                                                                                                                                                                                                                                                                                                                FUNCTION: MAY HAVE A MOLECULAR CHAPERONE ROLE IN THE SECRETED MATERIALS. IT IS PROBABLY NOT A MAJOR HEAT S
                                                                                                                                                                                                                              SIMILARITY:
                                                                                                                                                                                                                                                                                                       COMPONENT
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                                                                                   L14594;
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                         IPR000886;
                                         IPR003594;
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(Rel. 28,
(Rel. 40,
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                                                    1AH8.
                                                                                   AAA16785.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                              BELONGS TO THE HEAT SHOCK PROTEIN 90 FAMILY
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                      ER_target
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Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
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; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
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Best Local S
Matches 7
InterPro; IPRO01410; DEAD.
InterPro; IPRO01550; Helicase_(
InterPro; IPR00330; SNF2_N.
Pfam; PF00176; SNF2_N; 1.
Pfam; PF00271; helicase_C; 1.
Pfam; PF00271; helicase_C; 2.
SMART; SM00298; CHROMO; 2.
SMART; SM00490; HELICC; 1.
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CARBOHYD
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                                                                                                                                                                                                                     CHD1_HUMAN STANDARD; PRT; 1709 AA. 014646; 15-JUL-1998 (Rel. 36, Created) 15-JUL-1998 (Rel. 36, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Chromodomain-helicase-DNA-binding protein 1 (CHD-1).
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chaperone; Endoplasmic Signal.
SIGNAL 1 20
                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                    MIM;
                                                                                                                     EMBL; AF006513; AAB87381.1; HSSP; P23197; 1AP0.
                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                            CHD1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00014; PROSITE; PS00298;
                                                                                                            Genew;
                                                                                                                                                 or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                               HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
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                                                                                                           HGNC:1915; CHD1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . Similarity
7; Conserv
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                                                                                       IPR000953; Chromo.
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                                                                                                                                                                                                                                                                                                                                                                 (Human)
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HSP90; 1.
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77.8%;
                                                                    DEAD.
Helicase_C.
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N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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CHD1_MOUSE
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Best Local
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SITE
DOMAIN
                                                                                                the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE;
                                                                                                                                                                                                                                                                                                                                                  01-FEB-1995 (Rel. 31, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Chromodomain helicase-DNA-binding protein 1 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
REPEAT
                                                                                   EMBL; L10410; AAB08486.1;
                                                                                                                                                     This
                                                                                                                                                                                                                                                              MEDLINE=93211972; PubMed=8460153; Delmas V., Stokes D.G., Perry R.F. Palmas V., Stokes D.G., Perry R.F. Palmanalian DNA-binding protein
                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
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                                                                 P23197; 1AP0
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CHROMO_2;
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CHROMO 1.
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Pred. No. 1.
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InterPro; IPR000953; Chromo.
InterPro; IPR001410; DEAD.
InterPro; IPR001650; Helicase_C.
InterPro; IPR000330; SNF2_N.

MGI:88393;

PF00176; PF00271;

SNF2_N; 1.
; helicase_C; 1.
; chromo; 2.

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DR SMART; SM00298; CHROMO; 2.

DR SMART; SM00487; DEXDC; 1.

DR SMART; SM00499; HELICC; 1.

DR PROSITE; PS00598; CHROMO_1; 2.

DR PROSITE; PS00598; CHROMO_2; 2.

EN DNA-Dinding; ATP-binding; Helicase; Nuclear protein; Repeat.

SER-RICH.

TO DOMAIN 116 136 CHROMO 1.

ET DOMAIN 270 362 CHROMO 2.

ET NP_BIND 504 551 CHROMO 2.

ET NP_BIND 504 551 DEAH BOX.

FT NP_BIND 1629 1645 3 X 5 AA REPEATS OF H-S-D-H-R.

ET NP_BIND 1629 1633 2.

ET REPEAT 1635 1639 2.

ET REPEAT 1641 1645 3.

ET REPEAT 1641 1645 3.

FT REPEAT 1641 1645 3.

SO SEQUENCE 1711 AA; 196409 MW; FE3F8F8D13E32E24 CRC64;

Query Match

Best Local Similarity 77.8%; Pred. No. 1.5e+02;

Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Oy 2 KSSGKLISL 10

20 2 KSSGKLISL 10

21 11111 1

Db 783 RSSGKLILL 791

Search completed: January 10, 2003, 09:38:40
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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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1: sp_archea:*
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4: sp_inverteb
6: sp_mammal:*
5: sp_mac:*
7: sp_mac:*
8: sp_organel:
9: sp_phage:*
10: sp_plant:*
11: sp_vius:*
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Gapop 10.0 , Gapext 0.5
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42
1 XKSSGKLISLX 11
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sp_organelle:*
sp_phage:*
sp_plant:*
sp_virus:*
sp_virus:*
sp_vertebrate:*
sp_vertebrate:*
sp_rvirus:*
sp_bacteriap:*
sp_archeap:*
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sp_mammal:*
sp_mhc:*
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sp_bacteria:*
sp_fungi:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Q9FZI1	Q9fzil arabidopsis
		Q97MX6	O١
	_	17909	017909 caenorhabdi
		9VV43	Q9vv43 drosophila
		Q9M0I5	Q9m0i5 arabidopsis
		Q90W62	Q90w62 xenopus lae
		97240	P97240 salmonella
		71249	P71249 escherichia
		71250	P71250 escherichia
		77639	P77639 escherichia
		75032	P75032 escherichia
		Q97TH2	Q97th2 clostridium
		Q9PUC5	Q9puc5 brachydanio
		Q9D3:T9	Q9d3j9 mus mūsculu
301 '	4	9HAI6	Q9hai6 homo sapien
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ALIGNMENTS

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01-OCT-2001
01-OCT-2001
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BMBL; AE007519; AAK78050.1; -
Hypothetical protein; Complete proteome.

B8 AA; 10078 MW; 73D3D5100D44FE80 CRC64;
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01-JAN-1998 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
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01-JAN-1998
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                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE-99069613;
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                                                                                                                                                                                                   InterPro;
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                                                                                                                                                                                                                                              EMBL;
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EMBL; Z92970; CAB07481.1; -.
                                                                                                                                                                                                                                                                                                             Science
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                                                                                                                                    InterPro;
                                                                                                                                                                                                                                                                                                           investigating biology.";
Science 282:2012-2018(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-21359325; PubMed-11466286;
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STRAIN-ATCC 824 /
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PF00176;
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Pro; IPR000330; SN
PF00385; chromo;
    SM00298;
SM00487;
SM00490;
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7; Conserv
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(TrembLrel. 18, Last
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8 AA; 10078 MW; 73D3D5100D44FE80 CRC64;
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  helicase_C; 1.
; helicase_C; 1.
; snf2_n; 1.
; snf2_n; 1.
; chromo; 2.
; dexDc; 1.
; helicc; 1.
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Helicase_C.
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77.8%;
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Last annotation update)
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Pred. No. 11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence update)
                                                                                                                                                                                                                                                                                         (BY SIMILARITY)
                                                                                                                                                                                                                                                                  DOMAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1465
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A REPORT OF THE PROPERTY OF TH
                                                                            RA Addams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Addams M.D., Celniker S.E., Holt R.A., Sabburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Burton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Burton R.C., Rogers Y.-H.C.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Ballew R.M., Basu A., Baxer E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Besson K.Y., Benos P. V., Berman B.P., Bhandari D., Bolshakov S.,
RA Burtis K.C., Busam D.A., Bulter H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davles P.,
RA Bockova D., Botchan N.R., Bouck J., Brokstein P., Brottler P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davles P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davles P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davles P.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Herrandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibeqwam C.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibeqwam C.,
RA McInton B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Merkulov G., Milshina N.V., Norris J., Morris J., Noshrefi A.,
RA Merkulov G., Milshina N.V., Norris J., Woshrefi A.,
RA Merkulov G., Milshina N.V., Norris J., Woshrefi A.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Smith T.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Zheng X.H., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
Who Share S. W., Robers E.W., Rubin G.M., Venter J.C.;
RT Yele Senson D.L., Rubin G.M., Venter J.C.;
RT Yele Senson D.L., Naton R., Naton S., Dang W., Zhou X., Zhu S., Zhu X., Smith H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
Q9VV43
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Best Local
Matches
                                  "The genome Science 287: [2]
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Q9VV43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00598; CHROMO_1; 2.
PROSITE; PS50013; CHROMO_2; 2.
PROSITE; PS500690; DEAH_ATP_HELICASE; Ut
ATP-binding; Helicase; Nuclear protein.
SEQUENCE 1465 AA; 169391 MW; 87BE6
SEQUENCE FROM N.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match
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-2000 (TrEMBLrel. 13, Last sequence up-
-2002 (TrEMBLrel. 20, Last annotation
protein (RE55690p) (RE39465p).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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88.9%;
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Pred. No. 1.9e+02;
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29 MOILT
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                                                                                                                                                                                                                                                                                                                                       Pfam; PF00070, pyr_redox; 1.
PRINTS; PR00368; FADDUR.
PRINTS; PR00411; PNURDTASEI
PRINTS; PR00469; PNDRDTASEII
PROSITE; PS00018; EF_HAND; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Celniker S.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AB003527; AAF49479.1; -
EMBL; AY071493; AAL49115.1; -
EMBL; AY071358; AAL48980.1; -
EMBL; AY071358; AAL48980.1; -
FlyBase; FBgn0036616; CG4893.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
Lennard N., Quail M., Harris B., Rajandream
Mewes H.W., Lemcke K., Mayer K.F.X.;
Submitted (MAR-2000) to the EMBL/GenBank/DDB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embry
Spermatophyta; Magnoliophyta; eudicotyledons;
eurosids II; Brassicales; Brassicaceae; Arabi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-2000 (TrEMBLrel. 15, 01-OCT-2000 (TrEMBLrel. 15, 01-JUN-2002 (TrEMBLrel. 21,
    Q90W62
                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00036; efhand; Pfam; PF00070; pyr_redo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            - I- COFACTOR: FAD (BY SIMILARITY).
EMBL, AL161572; CAB79624.1; -.
InterPro; IPR002048; EF-hand.
InterPro; IPR001327; FAD pyr redox.
InterPro; IPR001100; Pyr redox.
InterPro; IPR001100; Pyr_redox.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EU Arabidopsis sequencing project; Submitted (MAR-2000) to the EMBL/GenBank/DDBJ
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                                                                                                                                                          KSSGKLISL
                                                                                                                                                                                                                                                                                                                         Flavoprotein;
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                                                                                                                                                                                                        Similarity 6; Conserv
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                                                                                                                                                                                                                                                                                                   559 AA;
                                                                                                                                                                                                          Conservative
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  PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                              Oxidoreductase.
                                                                                                                                                                                                                                                                                                   61784 MW;
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                                                                                                                                                                                                                                78.6%;
66.7%;
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77.8%;
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edons; core e
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eudicots; Rosidae;
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Pfam; PF00069; pkinase; 1.

ProDom; PD000001; Euk_pkinase; 1.

PROSITE; PS00108; GBD; 1.

PROSITE; PS001107; PROTEIN_KINASE_ATP; UPROSITE; PS00111; PROTEIN_KINASE_DOM; 1

ATP-binding; Transferase.

SEQUENCE 650 AA; 73736 MW; 9274DC6C3
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P97240;
01-MAY-1997
01-MAY-1997
01-JUN-2001
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01-DEC-2001
01-DEC-2001
01-MAR-2002
                                                                                          NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                      "Recent horizontal transmission of plasmids between populations of Escherichia coli and Salmonella enter J. Bacteriol. 179:1622-1627(1997).
EMBL; U81637; AAB49356.1; -.
EMBL; U81635; AAB49354.1; -.
EMBL; U81636; AAB49355.1; -.
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"A novel xenopus p21 activated kinase expressed in
"Bubmitted (MAY-2000) to the EMBL/GenBank/DDBJ datak
EMBL; AJ277826; CAC40979.1;
"InterPro; IPR0000719; Euk_pkinase.
InterPro; IPR000095; PAKbox/Rhobndng."
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Amphibia; Batrachia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Salmonella.
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                                                                                                                                                                                     Plasmid
                                                                                                                                                                                                                  ProDom;
                                                                                                                                                                                                                                               InterPro; IPR002584; RepA. Pfam; PF01651; RepA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Boyd E.F., Hartl D.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=8355;
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12812 MW;
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Chordata; Craniata; Ve.
; Anura; Mesobatrachia;
76.2%;
66.7%;
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66.7%;
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MUENCHEN F-related plasmi
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                                                                                             F9183FD2B00EAA95 CRC64;
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ia; Pipoidea; Pipidae;
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                                         InterPro; IPR002584; RepA. Pfam; PF01651; RepA; 1. ProDom; PD003734; RepA; 1. NON_TER 127 127 SEQUENCE 127 AA; 14282 M
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Pfam; PF01651; RepA; 1.
ProDom; PD003734; RepA; 1.
NON_TER 127 127
SEQUENCE 127 AA; 14310 |
                                                                                                                                                                                                   MEDLINE=96400908; PubMed=8807284;
Boyd E.F., Hill C.W., Rich S.M.,
"Mosaic structure of plasmids fro
                                                                                                                                                                                                                                                                                                                                                                                                                                              01-FEB-1997 (TrEMBLrel. 01-JUN-2001 (TrEMBLrel.
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Boyd E.F., Hill C.W., Rich S.M., Ha
"Mosaic structure of plasmids from
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                                                                                                                                           Genetics 143:1091-1100(1996).
EMBL: U50677; AAC44261.1; -.
                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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Bacteria; Proteobacteria;
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EMBL; U50667; AAC44251.1; -.
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6; Conser
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                                         14282 MW;
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Pred. No. 43;
3; Mismatches
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                  EMBL; U50668;
EMBL; U50669;
EMBL; U50670;
EMBL; U50671;
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P75032;
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                                                                                                                                       STRAIN=VARIOUS STRAINS;
MEDLINE=96400908; pubMed=8807284;
Boyd E.F., Hill C.W., Rich S.M., I
"Mosaic structure of plasmids frou
coli.";
                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1997 (TrEMBLrel. 01-NOV-1999 (TrEMBLrel. 01-JUN-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR002584; RepA.
Pfam; PF01651; RepA; 1.
ProDom; PD003734; RepA; 1.
NON TER 127 127
                                                                                                                                                                                                                                            SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                       Bacteria; P:
Escherichia
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EMBL; U50674; AAC44258.1; -.
EMBL; U50673; AAC44257.1; -.
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Boyd E.F., Hill C.
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01-JUN-2001
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    U50672;
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R 127
CE 127 AA;
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AAC44252.1; -...
AAC44253.1; -...
AAC44253.1; -...
AAC44254.1; -...
AAC44255.1; -...
AAC44256.1; -...
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.W., Rich S.M.,
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3; Mismatches
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Best Local
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       Brachydanio rerio (Zebrafish)
Eukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii; T
Cyprinidae; Danio.
NCBI_TaxID=7955;
                                                                                      O9PUC5; PRELIMINARY;
O9PUC5; O1-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                  STRAIN-ATCC 824 / DSM 792 / VKM B-1787;
MEDLINE=21359325; PubMed=11466286;
Noelling J., Breton G., Omelchenko M.V., Makarova K.S., Zeng Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I., Tatusov R.L., Sabathe F., Doucette-Stamm L., Soucaille P., Da Bennett G.N., Koonin E.V., Smith D.R.;
"Genome sequence and comparative analysis of the solvent-prod bacterium Clostridium acetobutylicum.";
J. Bacteriol. 183:4823-4838 (2001).
EMBL; AE001438; AAK76874.1; -
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Q97TH2;
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Clostridiales;
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                                                                     PSME3
                                                                               Proteasome
                                                                                                                                                                                                                                                                                                              Pfam; PF03370; CBM_21; 2.
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247 AA;
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Clostridiaceae; Clostridium
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Last annotation update)
subunit of S/T protein phosphatase
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••
                                                                                                                 Created)
                                                                                                                                                                                                                                          Score 32; DB
Pred. No. 85;
3; Mismatches
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Pred. No.
                               ) (Zebra danio).; Craniata; Vertebrata; El
Teleostei; Ostariophysi;
                                                                                                                                        PRT;
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                                                                                                                                                                                                                                                                                        68253021ED74BA27 CRC64;
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                                                                                       sequence update)
annotation update)
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43;
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                                                                                                                                                                                                                                                                 Length 247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Clostridia;
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                                           Euteleostomi;
                                 Cypriniformes;
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KSSGKLIS

Matches

Similarity 7; Conserv

Conservative

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1e+02;

Indels

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Gaps

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RESULT 14
Q9D3J9
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                                                                                                                                                                                                               RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Arakawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Baldarelli R., Barshi G.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barshi G.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barshi G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hil D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Auzuki H., Sato K., Wangwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Mynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.,
RA Hayashizaki Y.,
Ra Matsuda F., Schoenbach G., Seya T., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.,
Ra Matsuda F., Schoenbach G., Seya T., Kawaji H., Kohtsuki S.,
Ra Hayashizaki Y.,
Ra Matsuda F., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                    Query Match
Best Local
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Best Local
                                                                            InterPro;
PROSITE; P:
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001 (TrEMBLrel.
01-JUN-2001 (TrEMBLrel.
5430427019Rik protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=C57BL/6J; TISSUE=HEAD; MEDLINE=21085660; PubMed=11217851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AF195050; AAF05816.1; HSSP; Q06323; 1AVO. ZFIN; ZDB-GENE-991110-19; p:
                                                                                                                                                           "Functional annotation of a full-length mouse Nature 409:685-690(2001). EMBL; AK017351; BAB30703.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      subunit genes in zebrafish."; Scand. J. Immunol. 51:571-576(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murray B.W., Sultmann H., Klein J.; "Identification and linkage of the proteasome activator complex PA28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=20308156; PubMed=10849367;
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                                                                                                                                           MGD; MGI:1918648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   112 KSNGKLVEL 120
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                                                                              PS00061; ADH_SHORT; 298 AA; 33057 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FROM
                                                                                                                      IPR002198; ADH_short
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                                                                                                                                        5430427019Rik.
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66.7%;
                  76.2%;
87.5%;
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17,
17,
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Score 32; DB
Pred. No. le+C
0; Mismatches
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Pred. No.
                                                                                                   UNKNOWN_1
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Sciurognathi; Muridae; Murinae;
                                                                              4D4E47B146022BFB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4FD4857849A35A55 CRC64;
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88;
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                                       11;
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                                     Length 298;
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                                                                                                                                                                                                     collection.";
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59

KSSGKFIS

66

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RESULT 15
Q9HAI6
ID Q9HAI
AC Q9HAI
DT 01-M2
DT 01-M2
DT 01-M2
DT 01-M2
DT 01-M2
CE LAM
OC HOMOO
OC EU KA
OC NCBI
RN [1]
RN [1]
RN [1]
RN [1]
RA Nis
RA Wat
RA Wat
RA Wat
RA Wat
RA Wir
RA Wir
RA Wir
RA Wir
RA St

Search completed: January 10, 2003, 09:39:17 Job time: 32 secs
                                                                                                                                                                     В
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                                                                                                                                                                                                                                                                                                                                  Query Match 76.2%;
Best Local Similarity 87.5%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.

TISSUE-PLACENTA;

Strausberg R.;

Strausberg R.;

Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AKO21639; BAB13860.1; -.

EMBL; BC020611; AAH20611.1; -.

InterPro; IPR0022198; ADH_Short.

PROSITE; PS00061; ADH_SHORT; UNKNOWN_1.

Hypothetical protein.

SEQUENCE 301 AA; 33894 MW; 0754B491077927C4 CRC64;
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TISSUE=EMBRYO;
IISOGAI T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
IISOGAI T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H.,
Wagatsuma M., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.,
Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.,
Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K.,
Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y.,
Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y.,
Ninomiya K., Iwayanagi T.,
"NEDO human cDNA sequencing project.";
Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9НАI6;
Q9НАI6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Hypothetical 33.9 kDa protein.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                 2 KSSGKLIS 9
||||| ||
59 KSSGKFIS 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                  Score 32; DB 4; Length 301; Pred. No. 1e+02; 0; Mismatches 1; Indels
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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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42
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Copyright (c) 1993 - 2003 Compugen Ltd.
                       Cgn2_6/ptcdata/1/paa/US08_COMB.pep:

/cgn2_6/ptcdata/1/paa/US086_COMB.pep:

/cgn2_6/ptcdata/1/paa/US086_COMB.pep:

/cgn2_6/ptcdata/1/paa/US089_COMB.pep:

/cgn2_6/ptcdata/1/paa/US099_COMB.pep:

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/cgn2_6/ptcdata/1/paa/US095_COMB.pep:

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/cgn2_6/ptcdata/1/paa/US096_COMB.pep:

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/cgn2_6/ptcdata/1/paa/US096_COMB.pep:
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/cgn2_6/ptodata/1/paa/US081_COMB.pep:*
/cgn2_6/ptodata/1/paa/US082_COMB.pep:*
/cgn2_6/ptodata/1/paa/US083_COMB.pep:*
/cgn2_6/ptodata/1/paa/US083_COMB.pep:*
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/cgn2_6/ptodata/1/paa/US06_COMB.pep:*
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/ptodata/1/paa/US100_COMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

SUMMARIES

6	₅	4	ω	2	1	Result No.
40	40	40	40	40	40	Score
95.2	95.2	95.2	95.2	95.2	95.2	Query Match 1
	20		9	9	9	Query Match Length DB ID
1	22	22	22	21	1	DB
1 PCT-US99-13975B-136	US-09-869-003-14	US-09-869-003-1	US-09-869-003-4	US-09-701-588B-130	PCT-US99-13975B-130	ID
Sequence 136, App	Sequence 14, Appl	Sequence 1, Appli	Sequence 4, Appli	Sequence 130, App	Sequence 130, App	Description

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08-10-219-998-686	- C3 - C2 - C2 - C3 - C3 - C3 - C3 - C3	-08-20-08-324	-09-/91-53/-15	10-096-625-89	9-60-	-10-096-625-9	-09-972-211-9	-09-620-394B-40	9-570-581A-180	-09-513-9961	-09-791-537-	-09-270-767-4540	-60-191-681-	-60-191-637-	-60-173-464	-60-167-217	-09-614-150-	-236-359-	-10-203-139-	-10-203-138	0-203-137	-10-203-136	-10-203-135	-10-203-134	-10-182-998-1392	S-10-182-997-2233	S-10-182-995-2364	S-10-182-993-2939	S-09-864-761-3717	T-US01-00663-3030	S-60-360-039-510	S-60-248-542-20	-60-248-498-11	8-09-791-537-1	S-09-869-003-31	S-09-701-588B-	S-09-701-588B-13	PCT-US99-13975B-137
Sequence 59560, A	equence 13446,	quence 922, App	sequence 152	equence 89,	equence 89,	equence 90,	e 90, Ap	e 4020,	e 1	e 4449	e 1371	e 45403,	equence 7838,		e 8095,	equence	equence 10014,	O	equence 29167,	equence 14294,	e 3030	e 30027,	equence 28979,	e 30005,	equence 13923,	equence 22337,	e 23643,	equence 29399,	Sequence 37171,	quence 30302,	equence 5100,	equence 201, Ap	e 116, A	equence 105715,	equence 31, 1	equence 137, Ap	Sequence 136, A	Sequence 137, App

ALIGNMENTS

PCT-US99-13975B-130

Sequence 130, Application PC/TUS9913975B

GENERAL INFORMATION:
APPLICANT: UNITED BIOMEDICAL INC., ET AL.
TITLE OF INVENTION: ARTIFICIAL T HELPER CELL
TITLE OF INVENTION: EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
TITLE OF INVENTION: EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
TITLE OF INVENTION: EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
CORRESPONDENCE ADDRESS:
NUMBER OF SEQUENCES: 151
CORRESPONDENCE ADDRESS:
ADDRESSEE: MOTGAN & Finnegan, L.L.P.
STREET: 345 PAIK AVENUE
CITY: New YORK
STATE: NY
COUNTRY: USA
ZIP: 10154-0054
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC Windows
SOFTWARE: WOR'D SYSTEM: PC Windows
SOFTWARE: WOR'D SYSTEM: PCT/US99/13975B
FILING DATE: 21-JUNE-1999
CLASSIFICATION NUMBER: PCT/US99/13975B
FILING DATE: 20-JUNE-1998
FILING DATE: 20-JUNE-1998
ATTORNEY/AGENT INFORMATION:

NAME: Maria H. Lin REGISTRATION NUMBER: 29 REFERENCE/DOCKET NUMBER:

29,323

1151-4158PC1

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RESULT 1
US-09-701-588B-130
US-09-701-588B-130
; Sequence 130, Application US/09701588B
; Sequence 130, Application US/09701588B
; GENERAL INFORMATION:
APPLICANT: UNITED BIOMEDICAL INC., ET AL.
; APPLICANT: UNITED BIOMEDICAL INC., ET AL.
; TITLE OF INVENTION: ARTIFICIAL T HELPER CELL
; EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
                                                                                                             US-09-701-588B-130
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                                                     Best
                                                                     Query Match
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Matches 9; Conserv
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                              TELEPHONE: 212-758-4800
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 130:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC Windows
SOFTWARE: Word 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/701,588B
FILING DATE: 29.00v-2000
CLASSIFICATION: <Unknown>
PRIOR APPLICATION: <Unknown>
                               Local Similarity hes 9; Conserv
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2 KSSGKLISL 10
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                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 130:
                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 1151-4158PC1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 09/100,414
FILING DATE: 20-JUNE-1998
ATTORNEY/AGENT INFORMATION:
NAME: MAITH H. Lin
                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: New York
STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 345 Park Avenue
                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 10154-0054
                                                                                                                                                                                                          LENGTH: 9 amino acids
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                                     Conservative
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                                 95.2%; Score 40; DB 1; L
100.0%; Pred. No. 4.2e+06;
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                                   Indels
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APPLICANT: Cohen, Oren J.

APPLICANT: Fauci, Anthony
APPLICANT: The Government of the United States of America
APPLICANT: The Government of the Secretary of the
APPLICANT: as represented by the Secretary of the
APPLICANT: Department of Health and Human Services
TITLE OF INVENTION: Novel HIV Related Peptides
FILE REFERENCE: 015280-38620US
CURRENT APPLICATION NUMBER: US/09/869,003
CURRENT FILING DATE: 2001-06-22
PRIOR APPLICATION NUMBER: US 60/115,430
PRIOR APPLICATION NUMBER: US 60/132,760
PRIOR APPLICATION NUMBER: US 60/132,760
PRIOR APPLICATION NUMBER: US 60/132,760
PRIOR FILING DATE: 1999-05-06
PRIOR FILING DATE: 1999-05-06
PRIOR FILING DATE: 1999-05-06
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US-09-869-003-4
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                                                                                                                              PRIOR APPLICATION NUMBER: WO PCT/US00/00372
PRIOR FILING DATE: 2000-01-07
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 9; Conserv
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PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: WO PCT/US00/00372
PRIOR FILING DATE: 2000-01-07
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/869,003
CURRENT FILING DATE: 2001-06-22
PRIOR APPLICATION NUMBER: US 60/115,430
PRIOR FILING DATE: 1999-01-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Scala, Giuser APPLICANT: Chen, Xueni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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TYPE: PRT
ORGANISM: Artificial Sequence
                            TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Description of Artificial Sequence:p195 epitope OTHER INFORMATION: antigenic determinant peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:antigenic
                                                                                                           LENGTH:
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QΥ
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PCT-US99-13975B-136
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                                                                                                         Sequence 136, Application PC/TUS9913975B GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 14
LENGTH: 20
TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1999-01-11
PRIOR APPLICATION NUMBER: US 60/132,760
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: WO PCT/US00/00372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2000-01-07
NUMBER OF SEQ ID NOS: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/115,430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Scala, Giuseppe APPLICANT: Chen, Xueni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Xaa * any amino acid not identical to the amino OTHER INFORMATION: acid naturally flanking the subsequence at positions OTHER INFORMATION: 2-10 in HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Xaa = any amino acid not identical to the amino OTHER INFORMATION: acid naturally flanking the subsequence at positions OTHER INFORMATION: 2-10 in HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: MOD_RES LOCATION: (11)
APPLICANT: UNITED BIOMEDICAL INC.,
TITLE OF INVENTION: ARTIFICIAL THE
TITLE OF INVENTION: EPITOPES AS IMP
TITLE OF INVENTION: PEPTIDE IMMUNOG
NUMBER OF SEQUENCES: 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: determinant peptide
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                                                                                                                                                                                                                                                                                                             Local Similarity 100 nes 9; Conservative
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nes 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cohen, Oren J. Fauci, Anthony
                                                                                                                                                                                                                                                                                                                              95.2%;
100.0%;
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                                          NIOMEDICAL INC., ET AL.
ARTIFICIAL T HELPER CELL
EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
                           PEPTIDE IMMUNOGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.2%; Score 40; DB 100.0%; Pred. No. 0.. cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                   Score 40;
Pred. No.
                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                DB 22;
0.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Services
                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 11;
                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                             0;
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RESULT 7
PCT-US99-13975B-137
; Sequence 137, Applica
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCT-US99-13975B-136
                                                                                 COUNTRY: USE COUNTRY: USE COUNTRY: USE COUNTRY: 10154-0054

COMPUTER READABLE FORM: COMPUTER: IBM PC compatible COMPUTER: TEM PC Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/100,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                         FITLE OF INVENTION:
                                           APPLICATION NUMBER: FILING DATE: 21-JU
                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Modified site LOCATION: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 29, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                            CLASSIFICATION:
                                                                                                                                                                                                      CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Word 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Morgan & Finnegan, L.L.P. STREET: 345 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      2 KSSGKLISL 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10154-0054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New York
                                                                                                                                                                                                    New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Maria H. Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΝY
                                                                                                                                                                                                                                                                                                                                              Application PC/TUS9913975B
                                                                                                                                                                                                                                                                                    UNITED BIOMEDICAL INC., ET AL. NVENTION: ARTIFICIAL T HELPER CELL NVENTION: EPITOPES AS IMMUNE STIMU
                                                                                                                                                                                                                345 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  212-751-6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                            Morgan & Finnegan, L.L.P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM PC compatible SYSTEM: PC Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Floppy disk
                                       20-JUNE-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUNE-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.2%;
100.0%;
                                                                                                                                                                                                                                                                         PEPTIDE IMMUNOGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "(e-N)Lys"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 40;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1151-4158PC1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                        STIMULATORS FOR SYNTHETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 29
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09/100,412

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RESULT 8
US-09-701-588B-136
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; OTHER INFORMATION: /note= "(e-N)Lys"
PCT-US99-13975B-137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 136, Application US/09701588B
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: UNITED BIOMEDICAL INC., ET AL.
TITLE OF INVENTION: ARTIFICIAL T HELDER CELL
EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                           TELEFAX: 212-751-6849 INFORMATION FOR SEQ ID NO: 136:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 20-JUNE-199
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BM PC compatible
OPERATING SYSTEM: PC Windows
SOFTWARE: Word 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/701,588B
FILING DATE: 29-NOV-2000
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/100,414
FILING DATE: 20-JUNE-1998
ATTORNEY/AGENT INFORMATION:
NAME: MATIA H. Lin
BROTGERBARTON WINDER: 00-700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Modified site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KSSGKLISL 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH:
                                                          TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 1151-4158PC1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
                                             FEATURE:
                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KSSGKLISL 10
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  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Morgan & Finnegan, L.L.P. STREET: 345 Park Avenue
                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: New York
                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 29,323
                                                                                                                    LENGTH: 29 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 10154-0054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-JUNE-1998
Modified site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.2%; Score 40; DB 1; 100.0%; Pred. No. 1.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPTIDE IMMUNOGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             151
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RESULT 9
US-09-701-588B-137
; Sequence 137, Application US/09701588B
; GENERAL INFORMATION:
APPLICANT: UNITED BIOMEDICAL INC.,
POTTOPES AS IN
                                                                                                                            ; LOCATION: INCLUDENCE SITE
; OTHER INFORMATION: /note= "(e-N)Lys"
; SEQUENCE DESCRIPTION: SEQ ID NO: 137:
US-09-701-588B-137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: /note= "(e-N)Lys"; SEQUENCE DESCRIPTION: SEQ ID NO: 136: US-09-701-588B-136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                    Matches
                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                         TELEFAX: 212-751-6849 INFORMATION FOR SEQ ID NO: 137:
2 KSSGKLISL 10
||||||||
1 KSSGKLISL 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity es 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 KSSGKLISL 9
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                                                                                                                                                                                                                                                                                                                                                                         NAME: MATIA H. Lin
REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 11:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 09/100,414
FILING DATE: 20-JUNE-1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/701,588B FILING DATE: 29-Nov-2000 CLASSIFICATION: <Unknown>PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Word 97 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Morgan & Finnegan, L.L.P.
STREET: 345 Park Avenue
                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: UNITED BIOMEDICAL INC., ET AL.
TITLE OF INVENTION: ARTIEICIAL THELPER CELL
EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                  Similarity
9; Conserv
                                                                                                                                                                                                      NAME/KEY:
                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 10154-0054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: PC Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
                                                                                                                                                                                                                                                                                        LENGTH: 29 amino acids
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                                                                    Conservative
                                                                                                                                                                                                                                                            linear
                                                                                  95.2%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95.2%; Score 40; DB
100.0%; Pred. No. 1.:
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EPTIDE IMMUNOGENS
                                                                    0;
                                                                                    Score 40;
Pred. No.
                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                            1151-4158PC1
                                                                                    DB 21;
1.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.2;
                                                                                                  Length 29;
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                                                                    Indels
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                                                                  Gaps
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RESULT 10 US-09-869-003-31

Sequence 31, Application US/09869003

ENCODING HUMAN

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Gaps

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Sequence 105715, Application US/09791537
GENERAL INFORMATION:
APPLICANT: Bionomix, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
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                                                                                                                                ; ORGANISM: Hordeum vulgare US-09-791-537-105715
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CURRENT FILING DATE: 2001-66-22
PRIOR APPLICATION NUMBER: US 60/115,430
PRIOR FILING DATE: 1999-01-11
PRIOR APPLICATION NUMBER: US 60/132,760
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: WO PCT/US00/00372
PRIOR APPLICATION NUMBER: WO PCT/US00/00372
PRIOR FILING DATE: 2000-01-07
NUMBER OF SE0 ID NOS: 34
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                         APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SED ID NOS: 153055
SOFTWARE: Patentin version 3.0
SBO ID NO 155715
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LENGTH: 99
                                                                                     Query Match
                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Novel HIV Related Peptides FILE REFERENCE: 015280-386200US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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LOCATION: (1)..(45)
OTHER INFORMATION: Xaa = any amino acid not identical to the amino
OTHER INFORMATION: acid naturally flanking the subsequence at positions
OTHER INFORMATION: 46-54 in HIV-1, may be present or absent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: MOD_RES
LOCATION: (55)..(99)
OTHER INFORMATION: Xaa = any amino acid not identical to the amino
OTHER INFORMATION: acid naturally flanking the subsequence at positions
OTHER INFORMATION: 46-54 in HIV-1, may be present or absent
                                                                                                                                                                           TYPE: PRT
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TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:antigenic
OTHER INFORMATION: determinant peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46 KSSGKLISL 54
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                                               Local Similarity les 7; Conserv
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      2 KSSGKLISL 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cohen, Oren J. Fauci, Anthony
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Pred. No.
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                                                                  6e+02;
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Sequence 116, Application US/60248498
GENERAL INFORMATION:
APPLICANT: Beasley, Ellen
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CURRENT FILING DATE: 2000-11-15
NUMBER OF SEQ ID NOS: 264
SOFTWARE: FESTSEQ for Windows Version 4.0
SEQ ID NO 116
LENGTH: 491
TYPE: PRT
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APPLICANT: Beasley 517
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LENGTH: 529
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TITLE OF INVENTION: ISOLATED HUMAN PHASE I DRUG-METABOLIZING
TITLE OF INVENTION: PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN PHASE I
TITLE OF INVENTION: DRUG-METABOLIZING PROTEINS, AND USES THEREOF
TILE REFERENCE: CL000946
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TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10(52052)A CURRENT APPLICATION NUMBER: US/60/360,039
                                                                             APPLICANT: Cao, Yongwei
APPLICANT: Chen, Xianfeng
APPLICANT: Goldman, Barry S.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
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CURRENT FILING DATE: 2000-11-16
NUMBER OF SEQ ID NOS: 342
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77.8%;
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Pred. No. 6.1e+02;
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Pred. No. 5.6e+02;
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IN PLANTS FOR PRODUCTION

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CURRENT FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 5100
LENGTH: 1465
TYPE: PRT
ORGANISM: Caenorhabditis elegans
US-60-360-039-5100
Search completed: January 10, 2003, 09:46:27 Job time: 381 secs
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                                                                                                                                                                                                                                                                       ; LENGTH: 38
; TYPE: PRT
; ORGANISM: Homo sapiens
; CRGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC009296.1
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.92
; OTHER INFORMATION: EST_HUMAN HIT: BB883574.1, EVALUE 1.10e+00
OTHER INFORMATION: SWISSPROT HIT: P16415, EVALUE 8.20e-02
PCT-US01-00663-30302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: PCT/USO1/0063
CURRENT FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 04 February 2000 (04.02.00)
PRIOR PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR FILING DATE: 03 August 2000 (03.08.00)
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR PILING DATE: 03 October 2000 (03.10.00)
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 27 September 2000 (27.09.00)
PRIOR PRIOR FILING DATE: 21 September 2000 (21.09.00)
PRIOR PRIOR PRICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 31 June 2000 (30.06.00)
NUMBER OF SEO ID NOS: 38837
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; Sequence 30302, Application PC/TUS0100663
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Molecular Dynamics Sequence Listing Engine SEQ ID NO 30302
LENGTH: 38
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Best Local
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APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: ANALYSIS OF GENE EXPRESSION IN HUMAN PLACENTA
FILE REFERENCE: PB 0004 WO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Molecular Dynamics, Inc.
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Hanzel, David K.
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Pred. No. 1.9e+03;
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      GenCore version Copyright (c) 1993 - 2003
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US-09-724-676A-88039
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US-09-724-676A-88038
US-09-724-676A-73643
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US-09-701-588C-137
US-10-203-138A-14294
PCT-US02-33645-8
PCT-US02-33645-12
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    Sequence
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                                                                                  14.294, A
12. Appli
12. Appli
14. Appli
14. Appli
14. Appli
15. Appli
16. Ap
                     80, Appl
10553, A
11172, A
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US-09-701-588C-130
                                                                                                                             US-09-701-588C-130
                                                                                  Query Match
  2 KSSGKLISL 10
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45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
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US-10-131-837A-12	US-10-131-833A-12	US-10-131-830A-12	US-10-128-689A-12	US-10-127-901A-12	US-10-127-850A-12	US-10-127-842A-12	US-10-127-837A-12	US-10-127-835A-12	US-10-127-831A-12	US-10-127-829A-12	US-10-125-926A-12	US-10-131-829A-12	US-10-131-826A-12	US-10-131-824A-12	US-10-131-823A-12	US-10-131-819A-12	US-10-131-813A-12	PCT-US02-33541-4
•	•	`	`	Sequence 12, Appl	`	`	`	Sequence 12, Appl	-	•	`	•	Sequence 12, Appl	`	-	Sequence 12, Appl	Sequence 12, Appl	Sequence 4, Appli

ALIGNMENTS

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Sequence 130, Application US/09701588C
GENERAL INFORMATION:
APPLICANT: UNITED BIOMEDICAL INC., ET AL.
TITLE OF INVENTION: ARTIFICIAL T HELPER CELL
EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 130:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 10154-0054

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC Windows

SOFTWARE: Word 97

CURRENT APPLICATION DATA:
                                                                                                TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 130:
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 09/100,414
FILING DATE: 20-JUNE-1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: <Unknown> PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 151
CORRESPONDENCE ADDRESS:
ADDRESSEE: Morgan & Finnegan, L.L.P.
                                                                                                                                                                                                                                                                                                                       NAME: Maria H. Lin
REGISTRATION NUMBER: 29,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/701,588C FILING DATE: 29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 345 Pa
CITY: New York
Conservative
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                  95.2%;
100.0%;
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0;
                     Score 40;
Pred. No.
Mismatches
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                     DB 5; L
2.5e+05;
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RESULT 3
US-09-701-588C-137
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US-09-701-588C-136
                                                                                            Sequence 137, Application US/09701588C
GENERAL INFORMATION:
APPLICANT: UNITED BIOMEDICAL INC., ET AL.
TITLE OF INVENTION: ARTIFICIAL T HELPER CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 136, Application US/09701588C GENERAL INFORMATION:

APPLICANT: UNITED BIOMEDICAL INC.,
                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION: INFORMATION:
TELEPHONE: 212-758-4800
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION OPERATON PC WINDOWS
SOFTWARE: WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/701,588C
FILING DATE: 29-Nov-2002
CLASSIFICATION CURROWN>
PRIOR APPLICATION OPERATON
                                                                                                                                                                                                                                                                                                                    Local Similarity es 9; Conser
                                                                                                                                                                                                                                            1 KSSGKLISL 9
                                                                                                                                                                                                                                                                                2 KSSGKLISL 10
NUMBER OF SEQUENCES: 151
CORRESPONDENCE ADDRESS:
ADDRESSEB: Morgan & Finnegan, L.L.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/100,414
FILING DATE: 20-JUNE-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: /note- "(e-N)Lys" SEQUENCE DESCRIPTION: SEQ ID NO: 136:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Morgan & Finnegan, L.L.P
STREET: 345 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Maria H. Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Modified LOCATION: 10 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 10154-0054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: New York
STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 29,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 29 amino acids
                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                   95.2%; Score 40;
100.0%; Pred. No.
                                                            EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC EPTIDE IMMUNOGENS
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ARTIFICIAL T HELPER CELL
EPITOPES AS IMMUNE STIMULATORS FOR SYNTHETIC
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Matches
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RESULT 4
US-10-203-138A-14294
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PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 04 February 2000 (04.02.00)
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 26 May 2000 (26.05.00)
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 03 August 2000 (03.08.00)
PRIOR FILING DATE: 03 October 2000 (03.10.00)
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 27 September 2000 (21.09.00)
PRIOR FILING DATE: 21 September 2000 (21.09.00)
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR APPLICATION NUMBER: US 09/608,408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 14294, Appl GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Hanzel, David K.

APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: ANALYSIS OF GENE EXPRESSION IN BT 474
FILE REFERENCE: PB 0004 WO 8
                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/203,138A CURRENT FILING DATE: 2002-08-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Molecular Dynamics, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 1151-4158PC1
TELECOMMUNICATION: INFORMATION:
TELEPHONE: 212-758-4800
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
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nes 9; Conserv
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COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Word 97
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Maria H. Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/701,588C
FILING DATE: 29-Nov-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Penn, Sharron G.
Rank, David R.
Hanzel, David K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION:
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100.0%; Pred. No.
tive 0; Mismatch
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PCT-US02-33645-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 8
LENGTH: 443
TYPE: PRT
ORGANISM: chimpanzee adenovirus serotype Pan6
                                                                                                                                                                              Sequence 12, Application PC/TUS0233645 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 15438 SOFTWARE: Molecular Dynamics Sequence Listing Engine SEQ ID NO 14294
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Simian Adenovirus Nucleic Acid and Amino Acid Sequences, Vectors TITLE OF INVENTION: Containing Same, and Methods of Use FILE REFERENCE: UPN-02677PCT CURRENT APPLICATION NUMBER: PCT/USO2/33645 CURRENT FILING DATE: 2002-11-20 PRIOR APPLICATION NUMBER: US 60/331,951 PRIOR APPLICATION NUMBER: US 60/331,951 PRIOR FILING DATE: 2001-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                 TITLE OF INVENTION: Simian Adenovirus Nucleic Acid and Amino Acid Sequences, Vectors TITLE OF INVENTION: Containing Same, and Methods of Use FILE REFERENCE: UPN-02677PCT
                                                                                                           APPLICANT:
                                                                                                                                            APPLICANT: The Trustees of the University of Pennsylvania APPLICANT: Wilson, James M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR EPPLICATION NUMBER: US 60/366,798
PRIOR FILING DATE: 2002-03-22
             CURRENT APPLICATION NUMBER: PCT/US02/33645
CURRENT FILING DATE: 2002-11-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 39
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: The Trustees of the University APPLICANT: Wilson, James M.
PRIOR APPLICATION NUMBER: US 60/331,951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
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OTHER INFORMATION:
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TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
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                                                                                                         Gao, Guangping
Roy, Soumitra
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Roy, Soumitra
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87.5%;
                                                                                                                                                                                                                                                                                                                                                                                      73.8%; Score 31; 100.0%; Pred. No.
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Pred. No.
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2.6;
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; TYPE: PRT ; ORGANISM: Homo sapiens US-09-724-676-88040
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US-09-724-676-88040
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PCT-US02-33645-4
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Best Local S
Matches 7
                                                                                                           SEQ ID NO 88040
LENGTH: 1422
                                                                                                                                                          APPLICANT: COMPUGEN LTD
APPLICANT: COMPUGEN LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT APPLICATION NUMBER: US/09/724,676
                                                                                                                                                                                                                                                                         Sequence 88040, Application US/09724676 GENERAL INFORMATION:
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Best Local
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Query Match
Best Local Similarity
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CURRENT FILING DATE: 2002-11-20
PRIOR APPLICATION NUMBER: US 60/331,951
PRIOR FILING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US 60/366,798
PRIOR FILING DATE: 2002-03-22
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APPLICANT:
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PRIOR APPLICATION NUMBER: US
PRIOR FILING DATE: 2002-03-22
NUMBER OF SEQ ID NOS: 39
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SOFTWARE: PatentIn version 3.1
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APPLICANT: Roy, Sounitra
TITLE OF INVENTION: Simian Adenovirus Nucleic Acid and Amino Acid Sequences, Vecto
TITLE OF INVENTION: Containing Same, and Methods of Use
FILE REFERENCE: UPN-02677PCT
                                                                                                                                             SOFTWARE: PatentIn version 3.2
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    Application PC/TUS0233645

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77.8%;
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Pred. No. 1.1e+
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No.
 DB 5;
4.2e+02;
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RESULT 11
US-09-724-676A-88052
; Sequence 88052, Application US/09724676A
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US-09-724-676A-88040
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US-09-724-676-88052
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Best Local S
Matches 7
                                                                       GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 88040
LENGTH: 1422
                                         SOFTWARE: PatentIn version 3.2 SEQ ID NO 88052
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CURRENT FILLING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
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       TYPE: PRT
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nes 7; Conserv
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77.8%;
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Pred. No. 4.2e+02;
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Pred. No. 4.2e+02;
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                                                                                                                              RESULT 14
US-09-724-676-88039
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Best Local Similarity
7; Conserva
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-724-676A-88051
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                                                                                            Sequence 88039, Application US/09724676 GENERAL INFORMATION:
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APPLICANT: Compugen LTD.
TITLE OF INVENTION: Variants of alternative splicing
TITLE TINVENTION: Variants of alternative splicing
TILE REFERENCE: 129181.4 Compugen
CURRENT FILING DATE: 2000-11-28
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
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LENGTH: 1443
TYPE: PRT
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APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676 CURRENT FILING DATE: 2000-11-28
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
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77.8%;
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77.8%;
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77.8%;
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    Mismatches

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Pred. No. 4.3e+02;
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Pred. No. 4.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 31; DB 5;
Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                              Length 1443;
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0;

Gaps

0;

В Ş

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0,

0

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RESULT 15
US-09-724-676A-88039
US-09-724-676A-88039
Sequence 88039, Application US/09724676A
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 1291814 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 88039
LENGTH: 1444
TYPE: PRT
ORGANISM: Homo sapiens
US-09-724-676A-88039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : NUMBER OF SEQ ID NOS: 97222

: SOFTWARE: PatentIn version 3.2

: SEQ ID NO 88039

: LENGTH: 1444

: TYPE: PRT

: ORGANISM: Homo sapiens

US-09-724-676-88039
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Search completed: January 10, 2003, 09:39:59 Job time: 16 secs
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                                                                                                                                                  Query Match 73.8%;
Best Local Similarity 77.8%;
Matches 7; Conservative
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Best Local Similarity 77.8%;
Matches 7; Conservative
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786 RSSGKLILL 794
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786 RSSGKLILL 794
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Pred. No. 4.3e+02;
1; Mismatches 1; Indels
                                                                                                                                                  Score 31; DB 5; Length 1444; Pred. No. 4.3e+02; 1; Mismatches 1; Indels
                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                  Gaps
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09/869003

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FILE REGISTRY ENTERED AT 14:42:07 ON 10 JAN 2003
L1
              5 S KSSGKLISL/SQSP
     ANSWER 1 OF 5 REGISTRY COPYRIGHT 2003 ACS
L1
     285989-12-0 REGISTRY
RN
     Peptide, (Xaa-Lys-Ser-Ser-Gly-Lys-Leu-Ile-Ser-Leu-Xaa) (9CI) (CA
CN
     INDEX NAME)
OTHER NAMES:
CN
     1: PN: WO0042068 SEQID: 1 claimed protein
CI
    11
SQL
SEQ
         1 XKSSGKLISL X
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HITS AT:
           2-10
REFERENCE
            1: 133:134165
    ANSWER 2 OF 5 REGISTRY COPYRIGHT 2003 ACS
L1
    284673-35-4 REGISTRY
RN
    L-Lysine, L-.alpha.-glutamylglycyl-L-.alpha.-glutamyl-L-phenylalanyl-
CN
     L-cysteinyl-L-lysyl-L-seryl-L-serylglycyl-L-lysyl-L-leucyl-L-
     isoleucyl-L-seryl-L-leucyl-L-cysteinylglycyl-L-.alpha.-aspartyl-L-
     prolyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
    14: PN: WO0042068 SEQID: 14 claimed protein
CN
    20
SQL
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SEQ
                ===== ====
HITS AT:
           6 - 14
REFERENCE
            1: 133:134165
    ANSWER 3 OF 5 REGISTRY COPYRIGHT 2003 ACS
L1
RN
     253332-95-5 REGISTRY
     Peptide, (Lys-Ser-Ser-Gly-Lys-Leu-Ile-Ser-Leu-Xaa-Ile-Ser-Ile-Thr-
CN
     Glu-Ile-Arg-Thr-Val-Ile-Val-Thr-Arg-Ile-Glu-Thr-Ile-Leu-Phe) (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN
    134: PN: WO9966957 SEQID: 137 claimed sequence
CI
    29
SQL
         1 KSSGKLISLX ISITEIRTVI VTRIETILF
SEQ
           ========
           1-9
HITS AT:
REFERENCE
            1: 132:77607
     ANSWER 4 OF 5 REGISTRY COPYRIGHT 2003 ACS
L1
     253332-94-4 REGISTRY
RN
     Peptide, (Lys-Ser-Ser-Gly-Lys-Leu-Ile-Ser-Leu-Xaa-Ile-Ser-Ile-Ser-
CN
     Glu-Ile-Lys-Gly-Val-Ile-Val-His-Lys-Ile-Glu-Gly-Ile-Leu-Phe) (9CI)
     (CA INDEX NAME)
OTHER NAMES:
     39: PN: WO9966957 SEQID: 136 claimed protein
CN
CI
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Shears

Searcher

308-4994

SOL 29

SEQ 1 KSSGKLISLX ISISEIKGVI VHKIEGILF

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HITS AT: 1-9

REFERENCE 1: 132:77607

L1 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2003 ACS

RN 232933-99-2 REGISTRY

CN L-Leucine, L-lysyl-L-seryl-L-serylglycyl-L-lysyl-L-leucyl-L-

isoleucyl-L-seryl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 127: PN: WO9966957 SEQID: 130 claimed sequence

CN 4: PN: WO0042068 SEQID: 4 claimed protein

SQL 9

SEQ 1 KSSGKLISL

=====

HITS AT: 1-9

REFERENCE 1: 136:100838

REFERENCE 2: 133:134165

REFERENCE 3: 132:77607

REFERENCE 4: 131:115005

FILE 'HCAPLUS' ENTERED AT 14:43:25 ON 10 JAN 2003

L2 4 S L1

L2 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

DOCUMENT NUMBER: 136:100838

TITLE: Protection of rhesus macaques against disease

2001:836703 HCAPLUS

progression from pathogenic SHIV-89.6PD by

vaccination with phage-displayed HIV-1 epitopes Chen, Xueni; Scala, Giuseppe; Quinto, Ileana;

AUTHOR(S): Chen, Xueni; Scala, Giuseppe; Quinto, Ilear Liu, Weimin; Chun, Tae-Wook; Justement, J.

Shawn; Cohen, Oren J.; vanCott, Tom C.;

Iwanicki, Marcin; Lewis, Mark G.; Greenhouse,
Jack; Barry, Todd; Venzon, David; Fauci, Anthony

s.

CORPORATE SOURCE: Laboratory of Immunoregulation, NIAID, NIH,

Bethesda, MD, USA

SOURCE: Nature Medicine (New York, NY, United States)

(2001), 7(11), 1225-1231

CODEN: NAMEFI; ISSN: 1078-8956

PUBLISHER: Nature America Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The antigenic polymorphism of HIV-1 is a major obstacle in developing an effective vaccine. Accordingly, we screened random peptide libraries (RPLs) displayed on phage with antibodies from HIV-infected individuals and identified an array of HIV-specific epitopes that behave as antigenic mimics of conformational epitopes of gp120 and gp41 proteins. We report that the selected epitopes

Searcher: Shears 308-4994

09/869003

are shared by a collection of HIV-1 isolates of clades A-F. The phage-borne epitopes are immunogenic in rhesus macaques, where they elicit envelope-specific antibody responses. Upon i.v. challenge with 60 MID50 of pathogenic SHIV-89.6PD, all monkeys became infected; however, in contrast to the naive and mock-immunized monkeys, four of five mimotope-immunized monkeys experienced lower levels of peak viremia, followed by viral set points of undetectable or transient levels of viremia and a mild decline of CD4+ T cells, and were protected from progression to AIDS-like illness. These results provide a new approach to the design of broadly protective HIV-1 vaccines.

IT 232933-99-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(protection of rhesus macaques against disease progression from pathogenic SHIV-89.6PD by vaccination with phage-displayed HIV-1 epitopes)

REFERENCE COUNT:

44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:493570 HCAPLUS

DOCUMENT NUMBER:

133:134165

TITLE:

Novel HIV related peptides

INVENTOR(S):

Scala, Giuseppe; Chen, Xueni; Cohen, Oren J.;

Fauci, Anthony

PATENT ASSIGNEE(S):

United States Dept. of Health and Human

Services, USA

SOURCE:

PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	rent 1	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE		
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		CU,	CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
		ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,
		SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	
		VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM		
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
EP	1159	297		A	2	2001	1205		E	P 20	00-9	0424	5	2000	0107	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,
		PT,	ΙE,	FI												
PRIORIT	Y APP	LN.	INFO	. :					US 1	999-	1154	30P	Ρ	1999	0111	
									US 1	999-	1327	60P	P	1999	0506	
								,	WO 2	000-	US37	2	W	2000	0107	

AB This invention is the discovery of novel specific epitopes and antibodies assocd. with long term survival of HIV-1 infections. These epitopes and antibodies have use in prepg. vaccines for

09/869003 preventing HIV-1 infection or for controlling progression to AIDS. IT232933-99-2 284673-35-4 285989-12-0D, derivs. RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel HIV related peptides for use as vaccine or for inducing passive immunity against HIV or HIV-1 infection and progression to AIDS) ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS L2ACCESSION NUMBER: 1999:819268 HCAPLUS DOCUMENT NUMBER: 132:77607 Artificial T helper cell epitopes as immune TITLE: stimulators for synthetic peptide immunogens INVENTOR(S): Wang, Chang Yi

United Biomedical Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 129 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE. PATENT NO. ______ ____ _____ _____ WO 1999-US13975 19990621 19991229 WO 9966957 A2 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 9945808 A1 20000110 AU 1999-45808 19990621 19990621 BR 9912177 Α 20010410 BR 1999-12177 EP 1999-928826 19990621 EP 1089760 A1 20010411 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2002518463 20020625 JP 2000-555643 19990621 T2 US 1998-100412 A2 19980620 PRIORITY APPLN. INFO .: WO 1999-US13975 W 19990621

Disclosed are immunogenic peptide compns. comprising a T helper AΒ epitope linked to a target antigenic site or a synthetic B cell epitope, and optionally with a immunostimulatory sequence for inducing T helper cell-mediated immune response and producing high level of antibodies directed against the "target antigen". The disclosed immunogenic peptide compns. are useful for contraception or control of hormone-dependent tumor (with LH-releasing hormone as target), growth promotion in farm animal (with somatostatin as target), treatment of allergy (with IgE as target), prevention of HIV infection (with CD4 receptor as target), prevention of foot-and-mouth disease (with FMDV capsid protein as target), treatment of malaria (with circumsporozoite antigen of Plasmodium falciparum as target), and treatment of arteriosclerosis (with cholesteryl ester transport protein as target).

TΤ 232933-99-2 253332-94-4 253332-95-5

09/869003

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (artificial T helper cell epitopes as immune stimulators for synthetic peptide immunogens)

L2 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1999:329703 HCAPLUS

DOCUMENT NUMBER: 131:115005

TITLE: Selection of HIV-specific immunogenic epitopes

by screening random peptide libraries with

HIV-1-positive sera

AUTHOR(S): Scala, Giuseppe; Chen, Xueni; Liu, Weimin;

Telles, Jean Noel; Cohen, Oren J.; Vaccarezza,

Mauro; Igarashi, Tatsu; Fauci, Anthony S. Laboratory of Immunoregulation, National

Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD,

20892, USA

SOURCE: Journal of Immunology (1999), 162(10), 6155-6161

CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

Efforts to develop a protective HIV-1 vaccine have been hindered by AΒ difficulties in identifying epitopes capable of inducing broad neutralizing Ab responses. In fact, the high mutation rate occurring in HIV-1 envelope proteins and the complex structure of gp120 as an oligomer assocd. with gp41 result in a high degree of antigenic polymorphism. To overcome these obstacles, the authors screened random peptide libraries using sera from HIV-infected subjects to identify antigenic and immunogenic mimics of HIV-1 epitopes. After extensive counter-screening with HIV-neg. sera, the authors isolated peptides specifically recognized by Abs from HIV-1-infected individuals. These peptides behaved as antigenic mimics of linear or conformational HIV-1 epitopes generated in vivo in infected subjects. Consistent with these findings, sera of simian HIV-infected monkeys also recognized the HIV-specific epitopes. The selected peptides were immunogenic in mice, where they elicited HIV-specific Abs that effectively neutralized HIV-1 isolates. These results demonstrate the pools of HIV-1 mimotopes can be selected from combinatorial peptide libraries by taking advantage of the HIV-specific Ab repertoire induced by the natural infection.

IT 232933-99-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(selection of immunodeficiency virus-specific immunogenic epitopes by screening with HIV-1-pos. sera)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

FILE 'HOME' ENTERED AT 14:43:38 ON 10 JAN 2003

Searcher: Shears 308-4994

